# HEALTH in the SCHOOLS

MASSACHUSETTS DEPARTMENT OF EDUCATION

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

1949

WA 350 M414h 1949

29931910R



NLM 05137979 2

NATIONAL LIBRARY OF MEDICINE

# ARMY MEDICAL LIBRARY

FOUNDED 1836

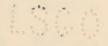


WASHINGTON, D.C.

# The Commonwealth of Massachusetts

# HEALTH IN THE SCHOOLS A MANUAL OF THE SCHOOL HEALTH PROGRAM





MASSACHUSETTS DEPARTMENT OF EDUCATION
with the collaboration of

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

John J. Desmond, Jr., Commissioner, Department of Education

VLADO A. GETTING, M.D., D.P.H., Commissioner, Department of Public Health WA 350 M414h 1949 c.1

## **FOREWORD**

On December 30, 1930, the Division of Child Hygiene of the Massachusetts Department of Public Health published "A Handbook on School Hygiene", which was planned to serve as reference material for administrators, medical officers, public health nurses, and others working for the health of the school child. The revision in 1940 of this Handbook was published under the new title "The Guide to the School Health Program."

Today's manual "Health in the Schools" is a second revision of "The Guide to the School Health Program." It is produced under the sponsorhip of the Massachusetts Departments of Health and Education.

"Health in the Schools" has been prepared by a group of specialists in the field of school health. Collaboration and approval between the Department of Public Health and the Department of Education was attained through the Massachusetts School Health Council, a body composed of staff members of each department.

John Steamond, J.

Commissioner of Education

Wads G. Hesting

Commissioner of Public Health

January 18, 1949

# TABLE OF CONTENTS

|  |       |   |   |   |          |   |   | P  | age |
|--|-------|---|---|---|----------|---|---|----|-----|
| Foreword   |       |   |   |   |          |   |   |    |     |
| Introduction   |       |   |   |   |          |   |   |    | 7   |
| School Health Services   |       | P |   |   | M. M. Co |   |   |    | 11  |
| School Health Program—Personnel Qualifications Teachers Health Coordinators Physicians Nurses Dentists Dental Hygienists Vision and Hearing Testers Lunchroom Personnel Custodians |       |   |   |   |          |   |   | ٠  | 12  |
| Personnel—Functions and Duties   |       |   |   |   |          |   |   |    | 19  |
| Superintendents Principals Coordinators of School Health   |       |   |   |   |          |   |   | 70 |     |
| Teachers   |       |   |   |   |          |   |   |    | 20  |
| Conditions to be noticed in observation of pup   | ils . |   |   |   |          |   |   |    | 21  |
| Health Education by  |       |   |   |   |          |   |   |    | 22  |
| Vision testing by  |       |   |   |   |          |   |   |    | 23  |
| Hearing testing by   |       |   |   |   |          | ٠ |   |    | 24  |
| Detection of Mental Problems and Retardation   | n by  |   |   |   |          |   | * |    | 25  |
| Measurements of Growth by  |       |   |   |   |          |   |   |    | 26  |
| Physicians   |       |   |   |   |          |   | ٠ |    | 26  |
| Family Physicians  |       |   |   |   |          |   |   |    | 27  |
| Examinations—Procedure Prior to  |       |   | ٠ |   |          | ٠ |   | 0  | 27  |
| Attendance of Parents at   |       |   |   |   |          |   |   |    |     |
| Procedure during   |       |   |   |   |          |   |   |    |     |
| Procedure following Examination  |       |   |   |   |          |   |   |    |     |
| Examination of Athletes  |       |   |   | ٠ |          |   |   | ٠  | 30  |
| Examination for Work Certificates  |       |   |   |   | ٠        |   | ٠ |    | 30  |
| Communicable Disease Control   |       |   |   | ۰ |          |   |   |    | 31  |
| Accident Prevention  |       |   |   |   |          |   |   |    | 31  |
| Other Duties   |       |   | 0 |   |          |   |   | ٠  | 31  |
| Guidance to Teachers   |       |   |   |   |          |   |   |    |     |
| School Nurse—Duties of   |       |   |   |   |          |   | ٠ |    | 31  |
| At Examinations  |       |   |   |   |          |   |   |    |     |
| Guidance of Teachers   |       |   |   |   |          |   |   |    |     |
| Emergencies at Schools   |       |   |   |   |          |   |   |    |     |
| Environmental Information  |       |   |   |   |          |   |   |    |     |
| School Environment   |       |   |   |   |          |   |   |    | 34  |
| Health Instruction   |       |   |   |   |          |   |   |    | 34  |
| Supervision of Nurse   |       |   |   |   |          |   |   |    | 35  |

|     |  |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      | P | age |
|-----|--|------|-------|------|------|-------|------|------|---|---|---|---|-----|---|---|------|---|-----|
|     | Lunchroom Personnel<br>School Lunches  |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 35  |
|     | Lunchroom Manager                      |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 36  |
|     | Custodian—Duties of                    |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 37  |
|     | Bus Driver—Duties of                   |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 38  |
|     |  |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
| F   | irst Aid                               |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 39  |
| _   |  |      | 9     |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
| C   | ommunicable Disease Con                | ntro | ol    |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 40  |
|     | Immunizations                          |      | ~ .   |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
|     | Preventive Measures wit                |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 44  |
|     | Return to School following             | ng . | Abs   | sen  | ce   |       |      |      | • | • |   |   | •   |   |   |      |   | 41  |
| Н   | ealth Education                        |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 41  |
|     | carm Eddcadon                          | *    |       |      |      |       |      |      | 1 | • |   |   |     |   |   |      | • |     |
| D   | ental Health                           |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 43  |
|     | Dental Hygienist                       |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 46  |
|     | Dental Service Programs                |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
|     | Bibliography                           |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
|     |  |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
| M   |  |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 48  |
|     | Problems—Symptoms                      |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 49  |
|     |  |      | *     |      |      |       |      |      |   |   | * |   |     |   |   | ٠.   |   | 51  |
|     | Bibliography                           |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 52  |
| 177 | nvironment                             |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 52  |
| L   |  |      |       | •    | *    |       |      |      |   |   | • |   |     |   | ٠ | *    | * | 52  |
|     | Seating                                |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
|     | Lighting                               |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 53  |
|     | Intensity Standards .                  |      |       | *    |      | •     | •    | *    |   |   | * |   |     | 1 | ٠ |      | • | 99  |
|     | Maintenance                            |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 54  |
|     | Use of Existing Facilities Room Finish |      |       |      |      |       | 1    | *    | * |   |   |   |     |   |   |      |   | 55  |
|     | Luminaries—Lighting Un                 |      |       |      |      |       |      |      | • |   | * |   |     | * |   |      | • | 56  |
|     | Heating and Ventilation                | mus  |       |      |      |       |      |      | * |   |   | * | •   |   |   | 1    |   | 00  |
|     | Sanitation                             |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
|     | Handwashing Facilities—                | Q+   | and   | ard  | la   |       |      |      |   |   |   |   |     |   |   |      |   | 56  |
|     | Toilets—Standards                      | 7516 | alici | aic  | 10   |       | *    |      | * |   | * |   |     | * | * | *    |   | 00  |
|     | Rest Rooms                             |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 57  |
|     | Health Room                            | *    | *     |      |      | •     |      |      | • | • | * | • | *   | • | * |      | * | 01  |
|     | Cubicles                               |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
|     | Lunchroom                              |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 58  |
|     | Playground                             | •    | •     | •    | •    |       | •    | *    | • |   |   | • | •   |   | • |      | • | -   |
|     | Equipment for Health R                 | oon  | n     |      |      |       |      |      |   |   | 1 |   |     |   |   |      |   | 59  |
|     | 1                                      |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
| Se  | ervices offered by Massacl             | hus  | etts  | B D  | epa  | rtm   | ent  | s of |   |   |   |   |     |   |   |      |   |     |
|     | Public Health, Mental                  | He   | alt   | h a  | nd : | Edu   | icat | ion  | 0 |   |   |   |     |   |   |      |   | 60  |
|     | Equipment for Vision an                | d H  | Iea   | ring | Te   | estin | ng   |      |   |   |   |   |     |   |   |      |   | 60  |
|     | Physically Handicapped                 |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 61  |
|     | Sight Saving Classes                   |      |       |      |      | -     |      |      |   |   |   | 1 | 100 |   |   | 1111 |   |     |
|     | T1 T 11 00                             |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 62  |
|     | Vocational Rehabilitation              |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   | 64  |
|     | Sources of Additional Int              | orn  | nat   | ion  |      |       |      |      |   |   |   |   |     |   |   |      |   |     |
|     |  |      |       |      |      |       |      |      |   |   |   |   |     |   |   |      |   |     |

|  | Page |
|--|------|
| General Laws Relating to School Hygiene  | . 66 |
| Maintenance of Public Schools and Subjects of Study. Ch. 71, Sec. 1  |      |
| Handicapped Children. Ch. 71, Sec. 42  | . 66 |
| Handicapped Children. Ch. 71, Sec. 42  | . 67 |
| Provision of Eyeglasses. Ch. 40, Sec. 5  |      |
| Payment of hospital Expenses resulting from playing injuries. Ch. 40A (1947)   | )    |
| Instruction in Lip Reading. Ch. 69, Sec. 29  |      |
| Medical and Nursing Service. Ch. 71, Sec. 53   |      |
|  | . 70 |
| Physical Examinations of Pupils, Teachers and Janitors. Ch. 71, Sec. 54  |      |
| Return to School after Contagious Disease. Ch. 71, Sec. 55   | . 70 |
| Handling of Children Showing Signs of Ill Health. Ch. 71, Sec. 56  | . 71 |
| The sale of the sa | . 72 |
| T I OR HILL OF THE   | . 72 |
| Vaccination. Ch. 76, Sec. 15   |      |
| Vaccination. Ch. 76, Sec. 15   |      |
| Vaccination—Exemptions. Ch. 111, Sec. 183  | . 72 |
| Right to Attend School without Vaccination. R. L. 44, Sec. 6   |      |
| Sanitation. Ch. 143, Sec. 42   |      |
| Employment of Children under Sixteen. Ch. 143, Sec. 60   |      |
| Issue of Employment Certificates. Ch. 149, Sec. 87   | . 75 |
| Sec. 88  |      |
| Sec. 89  |      |
| Sec. 90  |      |
| Children's Health Camps. Ch. 111, Sec. 62A   |      |
| Sec. 62B   |      |
| Sec. 62C   |      |
| Sec. 62D   | . 82 |
| Sec. 62E   |      |
| Sec. 62F   |      |
| Sec. 62G   | . 83 |
| Sec. 62H   |      |
|  | 11   |
| Dental Certificate—Facsimile   | . 84 |
| Dental Examination Request—Facsimile   |      |
|  |      |
| Evaluation Scale School Health   | . 86 |

## INTRODUCTION

The school health program is receiving increasing emphasis in the field of public health. Within the past two years, committees made up of representatives of nation-wide public-health, educational, medical, dental, nursing, and nutrition organizations have published policies and program outlines in the field. State and local medical societies are showing increasing interest in the school medical program. We are challenged to improve and to extend school health services. The graduates of Massachusetts schools must not only be well informed; they must be healthy, happy, and confident citizens.

An effective health program must start at the beginning of life and continue throughout its duration. Thus, school health is not a separate entity, but it is a part of a complete public health program. On the one hand it is dependent upon the care which the child receives in the home through the intelligence and co-operation of the parents. On the other hand, it is dependent upon the health facilities offered by the community. It involves many people—children, parents, superintendents of schools, health officers, principals, teachers, physicians, nurses, dentists, health educators, nutritionists, physical educators, psychologists, social workers, custodians, public and private organizations, the press, and radio. These varied elements must be welded into a team which will produce a balanced program.

The program of each community will be individual. The needs in each case must be determined by a free interchange of ideas between the personnel concerned, guided by school and community leaders. If requested, guidance may also be obtained from the Massachusetts Departments of Public Health, of Mental Health, and of Education. It is desirable that there be school and community planning through a Community Health Council composed of representatives of

the schools, public health authorities, the county medical and dental societies, and other organizations interested in and concerned with health.

Each school system and any large school within that system should establish an advisory health council of its own to provide leadership and direction for its health service and health education program, and to co-operate with the community health council through duly appointed representatives.

In addition to the professional, school, and health staff members, guest consultants from time to time (depending on the topic of the meeting), may include: representatives of local civic groups such as the Parent-Teacher Association, members of the fire, police, and sanitary departments, officers of the student council, and service squads.

For each such council there must be administrative leadership. There must be one person who has a definite responsibility for the total school health program, for co-operation with the medical and dental professions and with community health agencies, public and private. As has been emphasized this school health program concerns not only the school, but also the home, and the community groups. Active participation and co-operation of all is necessary for the realization of an adequate health service program. All schools should have a school physician who will function as a school medical adviser. There should be periodic evaluations of the school health services to determine the progress toward the program ideals, to record the accomplishments, the weaknesses, or the obstacles, which hinder the proper functioning of the services. One of the purposes for which the school health program is planned is the promotion of health consciousness in the pupils and in the school staff. This may be accomplished by repeated health appraisals, by special health services such as vision and hearing testing, and by a sustained drive to maintain a healthy school environment. For this purpose also, health education should be integrated

in the school curriculum with instruction in the functions and limitations of the community health resources.

Materials used for evaluation will include the regular reports from the staff, and a summary of the pupil's health appraisal and health practices at the end of the school year. The "School Health" section of the "Evaluation Schedule" compiled by the American Public Health Association may be used as a foundation for problem analysis. Under the guidance of the superintendent of schools, with the help of educators and school health specialists, the evaluation should be done by all members of the staff who have contributed to the school health services. The School Health Council or Committee might be helpful in solving problems resulting from this study. Consultation services for evaluation are available from the State Departments of Public Health and of Education.



## THE SCHOOL HEALTH SERVICES

In a literal sense the school health services commence with the registration of the entering child. In a more practical sense the school is and should be concerned with the health of the pre-school child. Complex post-natal influences make themselves felt in the problems of school life. For the critical moment of the first school year the child should be free of all remediable physical defects, he should be emotionally confident, and tranquil.

The initiative for planning the registration of entering children is the responsibility of the school superintendent. For the good health of all of his registrants he depends upon two powerful collaborators. One is the family physician whose supervision begins at birth and extends through the school years. The card which he fills out for his young patient, and submits to the superintendent at entrance is the report of his stewardship for the first five years—the five year result of his periodic appraisals of the child's health and of his treatment. The other collaborator is the community-sponsored Child-Health Conference which should complement the work of the family physician. Should the community be without such a conference the superintendent may well regard it as one of his prime responsibilities to organize one. Consultant and demonstration services are available from the Massachusetts Department of Public Health.

The Child-Health Conference, or the Well Child Conference as it is sometimes called, is staffed by a physician and a nurse. Additional staff members including dentists, dental hygienists, nutritionists and social workers may be obtained as for instance, from the District Health Office. Public and private facilities may be available for the correction of any ailment whether the pre-school child is supervised by his family physician or by the community health organization.

For the early and complete registration of entering school children the superintendent of schools depends upon publicity. One source is the older children of the family who are already familiar with school routine. He may use newspaper, radio, and film publicity. He may address parentmeetings and he may give notice to local medical and dental societies. Registration may be started in the early spring in the school building in the district in which the child lives. The registration staff is usually made up of first grade or kindergarten teachers, nurses and volunteers.

Necessary materials are the registration blank, the notice to parents, and the State Health Record form completed by the child's physician and dentist or by the staff of the Child Health Conference and N.O.P.H.N. record forms.

# SCHOOL HEALTH PROGRAM— PERSONNEL QUALIFICATIONS

The superintendent has the responsibility of selecting his personnel. He will have in mind that all school personnel should maintain good health. It is recommended that they be examined before employment and have periodic examinations by private physicians or by the school physician. Chest X-rays should be part of such examinations. These may be done free of charge at state sanatoria or at clinics.

Since the teacher plays a major role in the school health program, the school department should select teachers who possess good physical and mental health. A teacher should look well, should be well, and should be emotionally stable. To qualify for health teaching, an applicant should be trained in the basic sciences and in health education and should have taught, under supervision, the subject of health. Teachers who have not had this preparation should be required to take in-service courses in basic sciences and health education methods. The health rating of prospective teachers who are entering work directly from teachers' colleges

may be obtained from the Massachusetts Department of Education.

## THE HEALTH CO-ORDINATOR

School health services are under the overall administration of the superintendent of schools. However, because of the increasing complexity of the school health program and the need for its integration with the total education program and with the total community health program, he usually finds it advisable, either for the entire school system or for each school, to assign, to one individual, the responsibility for health co-ordination. This individual is variously called the health educator, health co-ordinator, or health consultant. The title is not important, but the job is.

The need for co-ordination is accentuated by the fact that so many of the specialized health services are provided by personnel who visit the school only once or twice a week. The physician, the dentist, and the nurse, are all making vital contributions to the health of the children but their contacts with teachers are sporadic. It is easily seen that such a co-ordinator must be diplomatic, must have a background of health knowledge, and must be capable of supplying leadership in the advisory school health council.

# THE SCHOOL PHYSICIAN

For the necessary qualifications of a school physician no standard will apply to all communities. It would be unrealistic to require the same qualifications of a school physician in a small community as of a school physician in a large city. The smallest political units are the rural towns. Unable to provide the salary for even a part-time school physician these small communities may form a union arrangement such as the superintendency unions in Massachusetts, in order to secure the services of a full-time professional health officer who may serve also as school physi-

cian. Larger units, or unions of larger units may secure a part-time or full-time school physician. The arrangements for employment, as well as the selection of personnel should encourage a consistently progressive school health program as distinguished from a static or regressive one.\*

The physician serving a school system must be licensed to practice in the State. He should have a pleasing personality, an interest in children, and a belief in his work. One who has been trained in pediatrics, if not a licentiate, is to be desired. Training and experience in public health work is a distinct advantage. Today the school physician has responsibilities of a much broader nature than the mere physical examination of pupils. These responsibilities as set forth by the Committee on Professional Education of the American Public Health Association (American Journal of Public Health, September, 1944) are in part as follows:— (Material in parentheses is ours.)

(A knowledge of the principles by which) the growth and development of normal children (may be encouraged). (They include familiarity with) (1) diseases of children, (2) the values, methods, and limitations of advisory service to parents, teachers, school administrators, and pupils, concerning the promotion of optimum growth and development, (3) the over-all school program, (4) the types of adjustment which are possible and necessary for health reasons for some children, (5) the methods of co-ordinating the medical and nursing services and other school health work with classroom instructions, physical education, recreation, lunchroom and nutrition services, so that he may assist all school personnel to make their most effective contribution to optimum pupil health. He should also appreciate the facilities that are available for treatment in the community (chief of which is the private physician), and the technics for explaining to the parents, child, and teacher the reasons why good health practices are desirable and why treatment is neces-

\*The Department of Public Health offers consultation services to physician, to school administrator, and to school committee.

sary. He should be aware of individual and community health problems which may be attacked through education and the place of the school as an integral part of the community's health resources. These responsibilities demand special educational qualifications over and above the M.D. degree.

Thus far we have dealt with the single part-time, or full-time physician, working within communities of comparatively small size. In a large school system there may be many physicians working under the general supervision and direction of a chief physician. In still larger school systems the chief physician may have one or more deputies, some of whom may have special titles, descriptive of their specialized duties.

The Director, Deputy, or Assistant Director of School Health—regardless of his actual title—will be ordinarily, a full-time employee of the Board of Education or of the Health Department, with a rank of, or equivalent to, an assistant superintendent if employed by schools or assistant health officer or deputy if employed by health departments. He establishes policies, selects other medical personnel, supervises, guides and evaluates all medical phases of the school health program, and is responsible to the school superintendent or to the health officer, or to both.

For the post of Director, or Deputy, or Assistant Director of School Health, the scope of modern school health activities requires a career man with special training both in education and in public health. In addition to being a well-trained physician with the qualifications listed above for the "School Medical Adviser" he will need the following special training and experience.

Basic principles of public health including general philosophy of mass health protection, epidemiology, vital statics, record systems and record keeping, environmental sanitation, and the principles of public health administration; an understanding of school procedures and organiza-

tion, the principles of educational supervision and administration, educational psychology, the administration of school health programs, including development of health education curricula, the organization and conduct of special classes such as speech correction, lip reading, and sight saving, and the development of school mental hygiene programs including mental testing. These are essentially the requirements for the Master of Public Health degree in most schools. Such qualifications are discussed in more complete detail in the American Journal of Public Health, Vol. 34; No. 9, September 1944.

# THE NURSE—QUALIFICATIONS OF

The nurse working in the school, under supervision, should have good health, tact, a happy temperament, and a professional manner. She should be neat in appearance. She should have a knowledge of the principles of public health and of health education methods. She should be a registered nurse. Completion of a year's program of study in public health nursing in an approved university previous to or within five years after appointment should be required.

Minimum qualifications for the public health nurse working without supervision:

Same as above with the addition of:

Completion of a year's program of study in public health.

Nursing in an approved university program.

At least one year's experience under supervision in an approved public health nursing agency in which family health is emphasized and the school program included.

Knowledge of child growth and development and understanding of children.

Knowledge of school organization and administration. Ability to organize and co-ordinate nursing service in the community.

Ability to work with lay and professional groups in town or school health councils.

An effort should be made by employing agencies to appoint qualified personnel. Public health nurses with minimum qualifications should be encouraged to participate in educational programs offered by the State or by local agencies. It should be expected that in five years after appointment the year's post-graduate study in public health nursing in an approved university shall have been completed. It is increasingly desirable for the nurse to complete work for her baccalaureate degree, but it is imperative, if appointment is to be with status of teacher. When more than one nurse is employed, it is recommended that one be designated as senior. She should be responsible for public health nursing policies and procedures, acting as co-ordinator with other community nursing agencies, school personnel and employing agency. All nurses designated as supervisor or director of public health nursing in any agency should have a baccalaureate degree in public health nursing. \*"The Public Health Nurse and School Health." National Organization for Public Health Nursing.—1790 Broadway, New York 19, N. Y.

# THE DENTIST—QUALIFICATIONS OF

The school dentist must be licensed to practice dentistry in Massachusetts. He should have (1) an interest in children and their dental problems, (2) experience in child dentistry, (3) sufficient patience and emotional stability to gain the confidence of children, (4) some knowledge of public health, and (5) a realization of the aims and psychological principles of modern education. Because of the lack of legislation permitting school committees to employ dentists to treat as well as to examine, neither dentists nor dental hygienists are a part of the regular school personnel in Massachusetts.

\*Obtained in part from American Association of School Administrators, "Health in Schools", Department of the National Education Association of the United States, 1201 Sixteenth St., N. W., Washington, D. C.

# DENTAL HYGIENIST—QUALIFICATION OF

A dental hygienist must be licensed to practice in Massachusetts. She should have tact, patience, emotional stability, an interest in children, and an acquaintance with educational methods.

## QUALIFICATIONS OF OTHER PROFESSIONAL STAFF

## Personnel for Vision and Hearing Testing

One person in each school system should be trained to test vision and hearing.

Because of the arduous nature of the work, this person should possess good health, should have vision corrected to 20/20 and should be under forty years of age. Other desirable requirements are, general professional interest, affection for and patience and experience with children.

# LUNCHROOM MANAGER

A trained lunchroom manager is preferred. She should know (1) food values, (2) how to buy economically, (3) how to prepare food and (4) how to serve food attractively. A knowledge of health education, of salesmanship, and of child psychology is desirable. In some schools the home economics teacher may be trained to supervise the lunchroom.

# CUSTODIAN

The custodian should receive instruction in maintenance of sanitation, pest control, lighting, ventilation and temperature regulation. He should be alert for the prevention of accidents. He should have patience and a genuine interest in children.

# FUNCTIONS AND DUTIES OF SCHOOL PERSONNEL IN THE SCHOOL HEALTH PROGRAM

## THE SUPERINTENDENT

The Superintendent administers the school health program. He is expected (1) to furnish leadership for school and community health programs, (2) to maintain standards of function and environment conducive to good health, (3) to assist in the development of health policies, with other members of his staff, and (4) to maintain standards of physical, mental, and emotional health among the personnel of the school system. The superintendent may delegate some duties to his school health co-ordinator or to his principals. It is essential that all phases of a school program be co-ordinated under one individual within the school administration.

## THE SCHOOL PRINCIPAL

The school principal is expected (1) to administer his school so as to maintain a healthy environment, (2) to give guidance and encouragement to his staff in matters of health and health education, (3) to observe and to maintain the health of his staff with the assistance of the school physician and nurse and (4) to give oversight and supervision to school health activities and take part in conferences. In the absence of nurse or physician the care of a school emergency may become the immediate responsibility of the school principal who then supervises first aid, notification of parents, and transportation home or to hospital, if necessary.

# THE CO-ORDINATOR OF SCHOOL HEALTH

Much has been and will be written concerning the functions of such a person. Since the final detail of his activities will be closely related to conditions in each individual school system we refer only in general terms to his functions. There are two main responsibilities: The first is to take over from principal or superintendent much of the burden of administering and co-ordinating the school health services, and the second is to supply leadership that is sustained and to a considerable degree "silent." There is a strong need for such capable leadership if the advisory school health council is to operate in a useful manner.

## THE TEACHER—DUTIES OF

# Observation of Pupil's Health

Daily observation and daily checking of the health status of each child is a function of the teacher. If necessary, special guidance in observation methods may be given to the teacher by the principal, by the nurse, and by the physician. Because of the daily opportunity, under varying conditions, to observe the child, individually and comparatively as a member of the class group, the teacher can better judge than the parents the health status of each child.

The teacher-nurse conference is a means of supplying the teacher with guidance. Such conferences should be periodic and planned. The teacher should not await such planned conferences, however, to refer any child who appears to be under par in health, to the school nurse. By "under par in health" we mean not only children who are obviously acutely ill with rash, cough, fever or vomiting, but those who are unduly tired or listless, or who are doing poor scholastic work without obvious reason; who are absent frequently; who seem to need glasses; who hear poorly or who need dental care. The teacher's report will permit the nurse to schedule her conferences according to urgency. teacher should observe her pupils as a conscientious and intelligent parent would. She should write her observations and reasons for referral on the Teacher's Health Card for that child and send the card to the nurse.

In her observation of her pupils, the conditions which should be noted include:

### 1. Eyes

- a. Sties or crusted lids
- b. Inflamed eyes
- c. Crossed eyes
- d. Repeated headaches
- e. Squinting, frowning, or scowling
- f. Protruding eyes
- g. Watery eyes
- h. Rubbing of eyes
- i. Excessive blinking
- j. Twitching of the lids
- k. Holding head to one side

#### 2. EARS

- a. Discharge from ears
- b. Earache
- c. Failure to hear questions
- d. Picking at the ears
- e. Turning the head to hear
- f. Talking in a monotone
- g. Inattention
- h. Anxious expression
- i. Excessive noisiness of child

### 3. Nose and Throat

- a. Persistent mouth breathing
  - b. Frequent sore throat
  - c. Recurrent colds
  - d. Chronic nasal discharge
  - e. Frequent nose bleeding
  - f. Nasal speech
  - g. Frequent tonsilitis

## 4. SKIN AND SCALP

- a. Nits on the hair
- b. Unusual pallor of face
- c. Eruptions or rashes
- d. Habitual scratching of scalp or skin
- e. State of cleanliness
- f. Excessive redness of skin

## 5. TEETH AND MOUTH

- a. State of cleanliness
- b. Gross visible caries
- c. Irregular teeth
- d. Stained teeth
- e. Offensive breath
- f. Mouth habits such as thumb sucking

# 6. General Condition and Appearance

- a. Underweight very thin
- b. Overweight very obese
- c. Does not appear well
- d. Tires easily
- e. Chronic fatigue
- f. Nausea or vomiting
- g. Faintness or dizziness

#### 7. Growth

- a. Failure to gain regularly over 3 months period
- b. Unexplained loss in weight
- c. Unexplained rapid gain in weight

## 8. GLANDS

- a. Enlarged glands at side of neck
- b. Enlarged thyroid

## 9. HEART

- a. Excessive breathlessness
- b. Tires easily
- c. Any history of "growing pains"
- d. Bluish lips
- e. Excessive pallor

## 10. POSTURE AND MUSCULATURE

- a. Asymmetry of shoulders and hips
- b. Peculiarity of gait
- c. Obvious deformities of any type
- d. Anomalies of muscular development

### 11. Behavior

- a. Overstudious, docile and withdrawing
- b. Bullying, over-aggressive and domineering
- c Unhappy and depressed
- d. Overexcitable uncontrollable emotions
- e Stuttering or other forms of speech difficulty
- f. Lack of confidence, selfdenial and self-censure
- g. Poor accomplishment in comparison with ability
- h. Lying (imaginative or defensive)
- i. Lack of appreciation of property rights (stealing)
- i. Abnormal sex behavior
- k. Antagonistic, negativistic, continually quarreling

False emphasis is often placed on perfect attendance. The health of the school child should be of paramount importance, not a perfect attendance record.

# Education in Health

Health education should be integrated by the teacher into her regular program. It may be furthered in individual conferences with pupils, and with the parents. A knowledge of "her parents" and of environmental conditions is almost as essential to her success as a knowledge of her pupils.

The teacher will need to consider curriculum adjustments for handicapped children. Such adjustments will usually be made after consultation with nurse or physician.

# Detection of Visual Defects

(The latest figures obtainable from the U. S. Public Health Service show that 10,000,000 children in the United States ages 5–17 have some visual defect.)

By law the examination of vision and hearing must be done by the teacher but it may be checked by physician or nurse. Markedly superior results will be obtained if a specially trained person is employed to do all vision and hearing screening in the schools. Use of home-room teachers for screening purposes is not recommended. As an alternative, one person may be selected to do all the screening in one school building. This person may be employed by one town or city for the period of time necessary to complete the tests A superintendent may employ such an examiner.

The new Massachusetts Vision Test requires special material. Schools desiring to use the improved form of the Test can purchase the needed equipment which is now available in the form of a complete kit for testing vision. This Test may be obtained from the Welch-Allyn Company, Auburn, New York. Each District Health Office has a demonstration kit which is available to schools for a limited time. District Health Offices will also co-operate in furnishing training for local personnel in the proper use of the equipment. Snellen cards can be secured, without charge, from the Department of Public Health, Division of Maternal and Child Health, or Bureau of Health Information. These cards are larger, of sturdier material, and cost more than the card previously supplied. One card to a school building should be adequate.

In connection with the school program of visual hygiene it is of particular importance to stress the difference between a school vision test and an eye examination. The former serves merely to detect children whose vision appears to deviate from normal and who, therefore, should have the benefit of an eye specialist's attention. It should not be assumed that the school test provides a diagnosis. It is not

to be expected that the findings from such an examination will always indicate the presence of a defect in the case of each child failing the school test.

Schools desiring to adopt the new form of the vision test can secure information and instructions from the Division of Maternal and Child Health, Department of Public Health, and the Bureau of Health Information. By its use, some children with impaired vision can be detected who are generally overlooked in the simple use of the Snellen card alone. The new test has been reported "Acceptable" by the Council on Physical Therapy of the American Medical Association and has received the endorsement of the Massachusetts Public Health Council. The teacher should watch for symptoms of eye defects and check these on the form for "Teacher Observation." Children who need glasses and who are financially unable to obtain them may secure them by applying to their local Board of Health. (See law, page ii.)

# Detection of Hearing Impairment

Although the teacher may call attention to the need for hearing tests in selected cases, mass testing is usually done by specially trained persons. The screening of hearing impairments in school children constitutes a unique school health responsibility since complex apparatus which is not otherwise accessible to children is required and available through the schools for successful detection. Ten per cent is a reasonable estimate of the incidence of hearing deviations from the normal in our school population. The best method for screening hearing is an individual pure tone test given with a discrete frequency audiometer. Unfortunately, this method is not practicable for a great majority of our schools since it is too time-consuming.

State District Health Offices are equipped with Western Electric 4C audiometers which provide phonograph record speech tests for as many as forty children.

State-owned equipment is available for loan to smaller communities which are unable to finance their own purchases. State District Health Offices are also equipped with pure tone audiometers which again are available for loan. Most State-owned equipment has been converted so that it may be used either for a group speech test or for a group pure tone test. The group pure tone test has recently been developed by the Division of Maternal and Child Health, Massachusetts Department of Public Health, and while still in the experimental stage, it gives promise of providing an answer to the problem of screening hearing satisfactorily on a mass basis. District Health Office personnel can furnish more details relative to this new method for testing hearing. The new method is termed The Massachusetts Hearing Test.

Reference: "Syllabus of Audiometric Procedure in the Administration of a Program for the Conservation of Hearing of School Children." Published by Douglas Printing Co., 109 North 18th Street, Omaha, Nebraska, for American Academy of Ophthalmology and Otolaryngology. (1945.)

# Mental Problems and Retardation

The teacher usually calls attention first to the need for mental tests in selected children. Certain behavior problems may be due to mental retardation, therefore, it is desirable to test all maladjusted children. The Law (see page i) requires that the school committee shall annually ascertain the number of children three years or more retarded in mental development in attendance upon its public schools, or of school age and resident therein. The Massachusetts Department of Education gives consultation and supervision for the formation of special classes for retarded children. Other observations such as absences and causes thereof and measurements of growth and development should be recorded by the teacher.

# Growth and Development

Body build must be considered in relation to weight. Each child has his own yearly record of weight and height measurements kept by the teacher.

## THE SCHOOL PHYSICIAN—DUTIES OF

The school physician should realize that he and other members of the school staff are members of a team which is working not only for the better health of the child and of the community, but also for the education of the child, parent, and community, in the science of good health. He must diagnose the special needs of his community, which is the environment of the child, and work to improve them so that the children of his schools will not encounter experiences in the community contradictory to his health teachings.

At this writing it is still necessary that annual examinations be carried out in the schools and of all children. Excepted are those examined by their own physicians in a manner complying with the state requirements. It should be recognized that because of the example he sets to impressionable youngsters it is doubly necessary that whatever the school physician does in the schools must be done well. Therefore he must not undertake more than he can accomplish with credit. To the children who are brought to his attention because of indications of illness, crippling defects or maladjustment, the greater amount of his time and effort is due. To the family physician and to available clinics or other approved medical agencies belongs the responsibility of any therapy which may be indicated. To the school physican and his staff belongs the guiding function.

The limiting word "physical" should be dropped in describing school examinations. These are more than physical, they are conference examinations. A "conference" examination implies the presence and co-operation of a parent in all elementary grades. In the secondary schools the pres-

ence of the parent is usually not desirable. It is better at these years to encourage feelings of self-responsibility so that such pupils will talk over their own problems with this physician of theirs. Should a physician find that he is not receiving the confidence of these older pupils he must pause and examine his methods—his own personality—for to be an adequate school physician the doctor must also be an acceptable counsellor.

Well conducted examinations and health procedures are not to be expected of a school physician unless the school supplies the facilities such as examining rooms which afford at least cheer, light, quiet, and privacy. If necessary as is often the case in older school buildings such facilities can only be supplied by additions. Whatever their construction—whether pre-fabricated buildings or even Quonset huts—it is desirable that they be attached to the school building.

This health examination can be an educational experience of lasting value in the child's life. It is, also, an unequalled opportunity to the physician of presenting health information to parents. Furthermore, in discussing with the child's teacher such recommendations as he needs to make, he finds himself with a third person to whom the experience is necessarily educational. Correcting misconceptions, dispelling superstitions, and instilling a desire for accurate scientific facts are fundamental contributions of physician to health education.

Family Physician The school physician may at his discretion omit the re-examination of those children who are under the superivision of their own physician. The school health record card or other suitable record form containing similar information will be sent to the school by the family physician and his recommendations should be followed.

# Procedure Prior to School Examination

School physician may meet with community physicians and dentists to enlist their support of the school health pro-

gram. Superintendent, school physician, and nurse may designate grades to receive examinations. A yearly schedule should be available for school personnel, so that it may be included in the school calendar. If the physican cannot meet the schedule, he should provide a substitute, subject to the approval of the school superintendent and School Board. The health records are reviewed by nurse and teacher to ascertain if all pertinent data are recorded for physician's information. Health teaching in the classroom should precede examinations. Teachers and nurse select pupils in other grades to be referred as previously detailed. Adequate space should be available within the school. If not available, it may be possible to use a community building.

# Attendance of Parents at His Examination

Parents should be urged to attend the examination. Invitations to parents should be written in the classroom and taken home by the pupils. Personal interviews and accepted publicity methods should be used to encourage parents to attend examination. Few parents would think of sending a young child to their family physician without their personal attendance, but experience has shown that it is often difficult to induce them to attend such an examination in the school. The Parent-Teacher Association can be of great assistance with this activity. The appointment system can prevent unnecessary waiting for mother and child, but it must be remembered that any practicing physician is subject to emergencies which often intrude upon his schedule whether of school work or private practice. Without the presence of either or both parents the examination of a young child is not comprehensive, yet few children regularly receive the complete examination from their family physician which the school physician stands ready to give. The school physician must address himself to the problem of obtaining their attendance. Without going into all possible methods, it is here suggested that a personal visit by his nurse to the home previous to his examination will accomplish one of two important objectives: Either it will induce the actual attendance of parent at the examination or the nurse will be able to complete a form-questionnaire which will supply to the doctor most of the essential information for his understanding of the child. Such an alternative is not as satisfactory as the actual attendance of parent because the information obtained can never be as complete, and the educational possibilities of such a conference will not have been received. It is better, however, than the mere physical examination which has been in vogue. Older children should be encouraged to take responsibility for their own physical and emotional status.

# Procedure During Examination

The child should be undressed. Physician should review health card which will include history of illness, result of vision, hearing, and psychological tests, growth tests, growth record, and comments of nurse and teacher. Examination should cover all items on health card. (Coded according to State committee recommendations.) Physician should record his findings and recommendations on card and discuss findings with parent or mature child and develop a plan for medical care, explaining how the result of uncorrected remediable defect may affect the child. He should discuss the need for remedial care with public health nurse and the public health nurse should assist parents to put into effect the plan for remedial care; she makes known to them the available community facilities.

# Procedure following Examination

The physician will discuss special problems with the family physician. Recommendations from the family physician on such problems should be recorded and followed. If a family physician requests that a student be excused from physical education his request must be honored. Some towns require such a request to be made on a special form.

The nurse will give the child an appointment for re-examination, if necessary, and she will arrange for a home visit or conference in school with parent, if medical care plans are not carried out. This activity should be co-ordinated with other public health nursing and school activities to prevent overlapping of services. Physician and nurse should discuss with the superintendent and teachers special problems involving environmental, emotional or physical classroom adjustments. It must be understood that the periodic health examination does not insure the maintenance of the health status found at the time of the examination, e.g., the pupil may develop an acute illness the day after the examination. Therefore, constant watchfulness by parent and teacher is necessary.

# Examination of Athletes

A special examination for students in upper grades who are entering competitive sports should be given early in the fall. A physician should be present at major games but this should not be considered as part of the program of the school physician as such, If the school physician feels that a student should not enter major sports his decision must stand. There should be close co-operation between the school physician and the physical education supervisor.

# Examination for Work Certificates

The law requires that a physician, before issuing a certificate, shall be familiar with:

- 1. The nature of the proposed employment.
- 2. The stresses and strains which it involves.
- 3. The child's physical condition.

An unconditional certificate may be given; a temporary one; a certificate may be refused completely, or refused for one occupation, but given for another. The card must be filled in by the employer before being signed by the physician

# Control of Communicable Diseases

In the control of communicable disease, the school physician, working in co-operation with the other physicians of the community and with the local Board of Health exercises another potentially educational function. Among these control measures are smallpox re-vaccination; toxoid booster doses: and such other supplementary measures that should be initiated and organized by the school physician. should also consider, from time to time, the advisiability of a tuberculosis survey, initiating and organizing it, if it seems warranted. Such recommendations as he may feel are desirable and educational should be explained to the teachers and to the community. The school physician should have a regular place on the agenda of all P.T.A. meetings, in his community. This provides an excellent opportunity to address the community.

## Accident Prevention

School safety is the responsibility of the school physician. A clearly defined procedure, to be followed in the case of school emergencies, should be established, preferably after consultation with the superintendent, the principals, and his nursing staff. He is educating by example in these emergencies. Furthermore, in his talks to parents, he may point out special hazards that threaten any one of his schools, whether or not they are remediable. That school hazards are apt to be rather insignificant compared to those in the average home may be emphasized frequently.

# Other Duties

Directly educational is his function of guiding teachers in systematic and continuous observation of the health of pupils so that deviations from normal will be promptly noted by the teachers and will be brought to his attention. Selected pupils will be brought by the school physician to the attention of consultants to determine in each individual case the advisability of special educational programs such as lip

reading instruction, speech correction, and sight conservation. He will determine the need for visiting teacher service, modified physical education, shortened school day, rest periods, and he will advise with teachers in constructing educational programs for the physically handicapped. He also is expected to give general supervision of sanitation and other environmental health factors within the school buildings and grounds. This includes the safety of water, safety of food and milk supplies in the lunchroom and their safe treatment by food handlers; the proper disposal of sewage and wastes; sanitation of drinking fountains and wash rooms; proper lighting, heating and ventilation and safety of gymnasium and playground. For individual children the length of the school day, extra curricular activities, the length and frequency of recess periods, even the type of examinations and methods of marking may call for the specific recommendations of the school physician. In the management of certain children who may be called "difficult" the teacher may seek the physician's advice.

# Professional Guidance to Teachers

He offers professional guidance in the field of teachers' health. The teacher's mental as well as her physical health is of direct concern to her employer because of its effect on the quality of her work. The school physician conducts periodic health examinations and offers consultation to employees with health problems.

# DUTIES OF A SCHOOL NURSE

No other person concerned with the school health program knows the home and neighborhood of each child so intimately as does the public health nurse. Because one of her major activities is home visiting, she learns and understands what this environment is, and its relation to the child's physical, emotional and mental health. She is, therefore, in an excellent position to act as liaison between school and

home and other community agencies. She interprets the conditions in the home to the school personnel, and she helps the parents to understand the health services and health policies of the school. Through conferences with parents she explains the importance of maintaining a home environment that provides for the healthy development of their children. If there are difficult home problems she refers parents to the right community agency for help. To school personnel and parents she explains the use of community health facilities. If these facilities are inadequate, she works toward their improvement and expansion through active membership on health committees and other community contacts.

The public health nurse assists the school physician to prepare and to conduct health examinations. The nurse and the teacher select the children who are most in need of examination, and they provide the physician with appropriate data. The nurse encourages parents to be present at the examination, helps them and the school personnel to plan ways of securing the care recommended by the physician, and of working out a suitable regimen that will lead the child to good health habits in and out of school.

Because teachers have day-to-day contacts with school children, the public health nurse instructs the teachers in the importance of maintaining continuous observation of each child's health and behavior. Through in-service education programs and individual conferences, she demonstrates to them the technics for conducting periodic screening tests—vision, hearing, weighing, and measuring.

Emergencies in a school are generally referred to the nurse if the physician is not present, but her responsibility is limited to first aid. Further treatment is given by the child's private physician or at a clinic as arranged by the family. Because an accident may occur when neither physician or nurse is present, a teacher or other person trained in first aid should always be present at school.

To the public health nurse belongs the additional responsibility of co-ordinating all available information concerning the health facts of every boy or girl. She does this by making sure that there is a complete up-to-date health record, upon which is entered data given her by the teacher, and medical, dental, and other health personnel; also by providing teachers, parents, and other agencies with written reports as needed, and by keeping a daily report of activities from which monthly and annual narrative and statistical reports are prepared.

## In Health Instruction

Instruction in health should be part of the total curriculum of the school. In addition, the best opportunities for teaching health frequently come in connection with other subjects. It is the teacher's role to give classroom instruction in health, and the nurse's role to act as consultant and advisor to the teacher. The nurse helps to plan the health curriculum, serves as a member of the school health council or planning group, and assists in the selection of authentic health education materials. She also makes a contribution by showing teachers how to relate health instruction to the specific needs of each child.

# In the School Environment

As a member of the team concerned with school health, the nurse has a part in seeing that standards are maintained for school safety and sanitation. In this connection she gives attention to teacher-pupil relationships as they influence mental, emotional, and physical health; to the school lunch; and to the health of school personnel. Nursing services should be provided to children of all ages in all schools—public, parochial and private.

Each community works out the arrangement that best meets its needs. In some places boards of education employ public health nurses to give service to schools. In other communities, nursing service is provided by arrangement with the local health department or purchased by a board of education from the local visiting nurses association just as nursing service is purchased by small industries. Three out of every four public health nurses in the United States give service to schools.

# Supervision is Important

Supervision is essential for the continual improvement of school nursing service, and for the professional growth and development of individual nurses. This is true even when the nurse serving the school meets all recommended qualifications.

Smaller school systems or organizations unable to provide supervision may arrange to get it through a local or state health department or by purchasing it from a voluntary agency such as a visiting nurse association. In addition to the qualifications necessary for the nurse in the school, the supervisor of school nursing also needs previous experience in a school health program and preparation in the theory and practice of supervision.

# LUNCHROOM PERSONNEL

This varies according to locality. A trained lunchroom manager is preferred. A community nutritionist may supervise if no trained manager or home economics teacher is available. The school nurse co-operates with the nutritionist, and in rural schools, may need to initiate the hot lunch program. The teachers should guide the pupils in choice of good school lunch.

# School Lunch

The law (page iv) permits the School Committee to prepare and sell lunches. The responsibility for these lunches is divided between the home, to supply a home lunch or a packed lunch, or to supply money for lunch, and the school to allow sufficient time for lunch and to supply a hot lunch when necessary. The community also has the responsibility for subsidizing through private or public agencies the feeding of needy children. The organization of the lunchroom arrangements should be the function of a school lunch committee which forms the policies and is responsible for their execution. This committee should include a school committee member, the principal, the school nurse, a teacher, a student, the lunchroom manager or the home economics teacher and a parent.

#### THE LUNCHROOM MANAGER

The lunchroom manager must organize and plan food services and supply education in nutrition.

Food services are as follows: the planning of menus to conform with nutritional principles and patterns; the purchase of food supplies and the establishment of necessary specifications; the supervision, preparation and serving of all meals; the maintenance of high standards; the supervision and direction of the duties of all personnel; the setting up of work schedules as a basis for efficient procedures and controls; the supervision of and execution of all financial records as required, including food costs control and monthly inventories; the establishment of adequate routines for sanitation and storage of food; the care, upkeep, and use of equipment, and other related duties.

# Her duties also include:

The establishment of approved health standards of workers; recommending the nutrition education needed in the school; developing the educational use of the lunchroom through the food service by increasing the interest of children and parents; studying children to determine the desirable type and variety of food; consulting with school administrator, teachers and others in all problems concerned with the provision of food by the school; participat-

ing in school and community health projects as opportunities arise and attending Massachusetts School Lunch Advisory Meetings at regular intervals.

#### A CUSTODIAN

Custodians have such an important part in the school health program that their interest and pride should be aroused and stimulated through representation in the group of health officials of a school system. In-service training is desirable. Just as the teacher by the nature of her work becomes the first person to notice in the individual child the signs of illness, so the school custodian by the nature of his work should be the first to become aware of and to remove any menace to school safety. In all of his duties inside and outside the building he should be alert against fires and falls, against broken bottles and rails,—the bite of animals or the traffic death.

The necessary safety measures that are beyond his skill should be reported at once to the principal.

The suggestions which follow have been taken from the Report of the Committee on Custodial Care of School Property in Massachusetts and the State Department of Education.

Classroom and corridor floors should be swept daily, oiled at least twice a year, and washed before each oiling. If it is found that an oiling twice or three times a year is not sufficient to keep the floors in satisfactory condition, either more frequent applications should be made or an oiled sweeping compound used to prolong the effects of the oil. A thorough scrubbing of floors should precede each oiling. Where the floors are not oiled they should be scrubbed more often, at least once a week, or oftener if the playground is muddy. The use of disinfectant in washing floors and furniture has little or no value. Its elimination furnishes an opportunity for a minor economy. No standard number of

times for washing windows can be recommended because of variations in atmospheric conditions. It should be borne in mind that dust and dirt materially diminish the amount of light. Generally speaking windows are not washed frequently enough. School furniture should be washed at least twice a year. Sanitaries should receive a daily cleaning with hot water and soap powder. Every municipality should have regulations governing the work of custodians. Ordinarily only men with experience in and knowledge of custodial work should be engaged.

#### THE SCHOOL BUS DRIVER

In addition to his responsibility to safely conduct pupils to and from the schools it is his duty to see that no factors exist which will endanger the health of the pupils while in his care. Because it may be necessary for students to walk substantial distances, in some areas, to meet the bus the driver should observe whether or not they are properly clothed for the weather conditions. If a pupil is not suitably clothed the driver should so report to the school authorities. Established schedules should be maintained to avoid unnecessary waiting. Waiting shelters should be provided wherever needed. The bus should be at a comfortable temperature, and heated during winter months. It should be ventilated, with assured safety from carbon monoxide fumes. Cleanliness should be maintained in the bus. Dirty conditions would be in conflict with school health teachings. To aid the driver, the pupil-traffic-control should make a brief inspection before the pupils leave the bus. The bus driver should include in his daily routine, (1) sweeping the floor, (2) dusting the seats, (3) inspecting for breakage or damage, (4) cleaning windshield, side windows and mirrors, and (5) checking exhaust and heating apparatus to make certain that no monoxide gas is reaching the interior of the bus.

#### FIRST AID

First aid is the immediate care given at school in sudden illness or accident. A qualified person should be selected in each school to give such care. Standing orders for the first aid treatment of all emergencies should be prepared by the school physician. Such standing orders should be posted and maintained in a prominent and suitable spot which should be designated by the physician after conference with principal, health co-ordinator, and nurse. The school should provide facilities for emergency treatment.

After-care is the responsibility of the family and the family physician. The doctor, nurse, principal, health co-ordinator or the selected qualified person mentioned above may report the accident or sudden illness to the parent. Except in the most minor matters it is not wise for the school to make recommendations for after-care. It is absolutely necessary, if the child is to be sent home, to make certain that a qualified person will be at home when the child arrives. This safeguard may on no account be omitted. If the school representative is unable to reach such a person in the home an injured or sick child may be kept under school supervision or the family physician may be directly requested to assume the care of the patient. Parents should agree at the enrollment of their children in school to permit medical consultation for serious accidents. Such a consultant would always be the family physician unless unavailable.

Minor injuries such as cuts, bruises, or scratches may be cared for by the children themselves under the supervision of the qualified selected person mentioned above. They may use materials from the first aid kit. This should provide a good teaching opportunity. Fire blankets should be kept in the chemistry laboratory, in the household art room, and wherever there is an open flame. A deluge shower is recommended in chemical laboratories.

#### COMMUNICABLE DISEASE CONTROL

#### **IMMUNIZATIONS**

Children should be vaccinated against smallpox and immunized against diphtheria during the preschool years. Tetanus toxoid immunization is also recommended. A booster dose of diphtheria toxoid should be given on entrance to primary and high school grades. Immunization is the function of the local Board of Health, not of the School Department. Any school children needing vaccination or immunization should be referred to their family physicians or, lacking them, to the local Board of Health. No unvaccinated child may be admitted to school unless he presents a certificate signed by a registered physician exempting the child from vaccination because of his health.

#### PREVENTIVE MEASURES IN SCHOOL

The term "epidemic" means affecting a large number of persons in a community at the same time. It is generally agreed that schools should be kept open in time of epidemic. The public health nurse co-operates with the school physician in the control of communicable disease by helping the teachers to recognize suspicious signs and symptoms, to understand protective measures, to record disease history and completed immunizations. It has already been pointed out that teachers should observe their children closely. Under epidemic conditions they should be especially alert to signs of illness and should know each non-immune child. If a child shows symptoms suggesting a communicable disease he should be isolated and the school physician should be called. The superintendent or one delegated by him will see that the child is sent home as soon as arrangements can be made. (See First Aid.) The public health nurse assists with arrangements for isolation and care of sick children until called for by parents. Parents and children will be given pertinent information.

The School department should notify the local Board of Health of all children excluded because of symptoms suggesting communicable disease. The law requires the local Board of Health to notify the School Department of reported cases of communicable disease in the community.

RETURN TO SCHOOL AFTER COMMUNICABLE DISEASE OR (EXPOSURE TO IT)

According to law a child may not return to school after exposure to or illness with a communicable disease unless he brings a certificate from the local Board of Health or the school physician. Certificates from the family physician are not legal unless the Board of Health designates private physicians as agents to issue such certificates.

The community will be informed by the local Board of Health of accepted practice in the control of communicable disease. School health personnel will give instruction in the control of communicable disease in all contacts with parents and children. Parents and children should be encouraged to assume responsibility for recognizing the signs and symptoms of communicable disease and the need for protecting others.

#### HEALTH EDUCATION

Health education is a general term covering a wide field of human experiences. It has been defined as follows: "Health Education is the sum of all experiences which favorably influence habits, attitudes, and knowledge relating to individual, community and racial health."\* "The child is educated in health in all his experiences that in any way influence his habits, attitudes and knowledge relating to health, but the experiences he has that emerge from and are identified with school life are those of School Health Edu-

\*Fourth Year Book of the Department of Superintendence of the N.E.A.

cation."\*\* Therefore, health education should be integrated in the entire school curriculum.

Education for healthful school living may be divided into two major divisions as follows: factors influencing the establishment of sanitary and safe school environment for the protection of the child and factors influencing the establishment of an orderly and well-organized school day, so that the greatest learning may result for the child. The teacher will see the value of classroom learning experiences associated with healthful living in school, as one of the most effective avenues for teaching health.

Health instruction includes the planning of educational experiences for the child so that he may acquire desirable health attitudes, practices and a sound, scientific background pertaining to personal and community health, thus becoming an intelligent self-directed citizen. Such learning experiences may include those associated with healthful living in school, those associated with school health examination, those which are associated with the general organization of all subject matter and the learning experiences which are organized and specific.

Direct health instruction, with a definite weekly time allotment, is considered especially desirable after the third grade. Such direct health instruction should utilize all the best teaching procedures and motivations available. The health education textbook has an important and essential place in such instruction, but effective health teaching cannot be confined solely to the textbook, or to recitation type of teaching. The functional approach towards solving health problems as they occur in the actual life of the child is to be emphasized.

Since many of the objectives of health teaching can not be achieved before the pupil is mature, there should be direct health instruction also in the secondary schools. The trend

<sup>\*\*</sup>Committee Report Health Education Section, Am. Phys. Ed. Assoc., Journal of Am. Assoc. for Health, Phy. Ed. and Rec.

is towards the concentrated health courses, one in the junior high school and the other late in the senior high school period. It is desirable that such classes meet several times a week in order that a functional type of health instruction may be developed.\*

Parent education in matters of health is to be emphasized since it is recognized that the school health program can not be effective unless at the same time parents are being informed as to the objectives of the school health education program and its methods of procedure. Co-operation of all parent and civic groups of the community for the understanding and appreciation of the school health program is essential. In addition, it is recommended that each classroom teacher should take responsibility for the co-ordination of the home with the specific health program she is developing in the classroom. It is only through co-ordinated learnings in the home and in the school that the specific health objectives of each grade level may be achieved. Home, school, and community should be co-ordinated for health.

As has been previously stated, it is the function of the Superintendent of Schools to administer the health program. Often administrative leadership is furthered by the appointment within the school system of a supervisor or co-ordinator for the total school health program, of which health education is an integral part. In some systems the health program is co-ordinated under the direction of a school administrator in charge of all special services to children.

### DENTAL HEALTH

The school committee may employ a dentist to do dental examinations but not to treat disease. Furthermore, laws do not permit school systems to administer dental clinics (General Laws, Chapter 111, Section 50). Clinic service may be administered by the board of health or by private

<sup>\*&</sup>quot;Health Education"—N.E.A.—A.M.A., 1948 ed., p. 242.

agency. In the same way, dental hygienists, when employed by school committees, must be employed as teachers as there is no legislation allowing them to be employed as dental hygienists by the school department. The dental hygienist should perform dental inspections and dental prophylaxis when possible. Her work will be associated with education in oral hygiene for parent and pupil. She should also provide the teacher with material for health education.

Dental health is a part of general health which presents a unique problem because of the large percentage of the population repeatedly affected each year. At least 95% of all school children in Massachusetts have experienced dental caries by the time of entrance into high school. One half of the teeth of the average pupil are attacked by time of high school graduation. This incidence of dental caries is one of the highest in the United States.

Dental decay is found as early as two and one-half years of age. It is suggested that children attending preschool registration be given notification blanks to take to the dentist and that they be urged to present these to the teacher at the opening of school. In this way the certification of dental corrections may be presented along with that of vaccination upon entering school. Immediately upon entrance to elementary school, attention should be directed towards the care of the permanent teeth. It is in this age group that care of the first permanent molars should begin as these teeth are so subject to decay that neglect can lead to their loss by extraction by age ten.

Junior and Senior High School students have, for practical purposes, their complete permanent dentitions. Dental caries continues to be highly active in this group. Because many of the dental care and educational programs are discontinued at the completion of elementary school, and because of a change in responsibility for health matters, there results a degree of neglect sufficient to allow irreparable damage to permanent teeth.

The Council on Dental Health of the American Dental Association states: "Dental Science has advanced to the point where decay of the teeth can be controlled. The following four measures are necessary for its accomplishment:

- 1. Regular visits to the dentist for examination.
- 2. Early treatment of small cavities. Delay will be serious.
- 3. Selection and consumption of a proper diet and temperance in the use of confections and sweetened beverages.
- 4. Proper and regular cleaning of the teeth after eating. Your dentist can aid in teaching you a correct method."

Recent developments in fluoride therapy indicate that the procedure of topical application of sodium fluoride should be added to the above recommendations.

It is recognized that good dental health is dependent chiefly on the accomplishments of the private dentists of the community. In an effort to make available the services of these practitioners to those children who can afford them. a form (see appendix, page xi) has been developed for class room distribution. When this card is sent home the parents are expected to bring the child to the family dentist within a reasonable length of time. Space on the card is provided for the dentist's signature usually verifying one of three facts: (1) Treatment is needed and has been arranged privately. (2) There is no need for further treatment at the time. (3) Treatment is needed but no provisions can be made for private care by the parent of the child. This type of notification is available from both state and local agencies. Its use thus far has been limited largely to those communities where a sufficiently large number of participating private dentists exists and where their co-operation has been previously obtained. When the notification forms are distributed in any classroom it is hoped that organized dental health instruction will immediately follow in order to teach

pupil and parent the need for dental care. Instruction should be planned to extend into the home as much as possible. Education of parents is needed for co-operation in carrying out dental care. Children in elementary grades should be instructed in proper dental practices. The value of the services and relationship with the family dentist should be taught the pupils.

The Dental Certificate signed by the dentist verifying the correction of all existing dental defects is used to a considerable extent. About 100,000 are provided to the dentists annually in Massachusetts. The person in charge of the dental promotional program may collect these certificates and estimate the percentage of pupils receiving complete dental care.

#### THE SCHOOL DENTAL HYGIENIST

Fifteen percent of the registered dental hygienists in Massachusetts are employed in school dental programs. These hygienists are employed as dental inspectors and as teachers in oral hygiene. Many perform dental prophylaxis to a limited age group. When possible, these persons should have a pedagogical background in addition to their basic training in dental hygiene. The satisfactory effect of this type of program is evidenced in the high percentage of completely treated cases.

# DENTAL SERVICE PROGRAMS

Boards of Health and private agencies may establish and maintain clinics for dental care. They must be licensed. The agency administering the clinic should set up the standards for eligibility. When no clinic is available some means of supplying needed dental care to indigent children of all grades must be planned.

The Massachusetts School Health Council composed of members of the staffs of the Departments of Education and of Public Health considers matters concerning the schools and various health personnel and they make the following recommendation: "Children who need medical or dental care, and who by necessity must make appointments with private doctors or dentists during the regular school hours, should be accorded the same privilege as that enjoyed by children who, with the approval of school authorities, attend clinics, i.e., excuse without absence."

Consultant service on all types of dental programs is available through the Dental Division of the Massachusetts Department of Public Health, 227 Commonwealth Avenue, Boston 16, Massachusetts.

#### REFERENCES

The following materials are considered the most authentic dental references available and may be obtained from the American Dental Association, 222 East Superior Street, Chicago 11, Illinois. A current price list is available upon request.

Dental Health Program for Elementary and Secondary Schools

This manual outlines the important steps in developing and conducting school dental health programs.

# Teeth, Health and Appearance

An unusually attractive book bound in cloth and containing over one hundred illustrations, fifty of them in color. This book is especially suited for elementary school libraries and reading tables.

# Your Child's Teeth

A booklet prepared for parents, teachers, nurses, dental hygienists, dentists and physicians. The illustrated text provides comprehensive dental health information concerning children from preschool through high school age.

# Tommy's First Visit to the Dentist

A story of a real boy's visit to a real dentist, told with pictures to help the preschool children understand what to expect on their first visit to the dentist.

#### Pete Meshakee

A sixteen page booklet on the customs, habits, and dental health of the Chippewa Indians. Includes a short Ojibwa English dictionary. Prepared especially for the 8 to 12 year old child. Recommended to intermediate grade teachers as supplementary reading.

# The Control of Dental Caries

A concise explanation of the present knowledge of the cause and results of dental caries. An authentic statement for teaching use.

## Fluorine and Dental Caries Control

A statement of the current position of fluorine in dentistry. Excellent footnotes for additional references on the subject. A leaflet for teacher information.

# Dentistry as a Professional Career

General information about the dental professions—dentistry, dental hygiene. Dental assisting-schools of training are listed as well as requirements for admission.

# MENTAL HEALTH

# RELATIONSHIP BETWEEN EDUCATION AND MENTAL HYGIENE

Today education is thought of in terms of preparing the child for living. He goes to school not only to learn about the world in which he lives, but also to learn how to live in that world. Therefore, responsibility for the child's physical, mental, social, and vocational success is inevitably accepted by the school with as much concern as is the matter

of his education in the traditional academic subjects. Mental hygiene and education are collaborating to produce an individual with a well-rounded personality, who, in addition to having acquired academic information, has the capacity for a successful adaptation to life.

The principles of mental hygiene are being successfully utilized by alert educators. The understanding teacher realizes that the basis for a happy and successful adulthood is the development of a normal personality in the growing child. To that end, she tries to give him individual guidance and attempts to understand and to assist the process of his development.

Next to the parent, the teacher is the most influential person in the child's life. She is in a strategic position, not only to detect problems in the beginning, but also to play an important role in the correction of them. The matter of her personality is of real concern if she is to fulfill her obligations to the pupils.

# PROBLEMS FREQUENTLY OBSERVED IN CLASSROOM THAT INDICATE NEED FOR ATTENTION AND CORRECTION

In every school there are children who are erratic in their school progress, perplexing in their behavior, and who present various types of personality defects. Influences within the child, the home, school, or neighborhood are often responsible for these difficulties. The following list of symptoms represents some of the more common manifestations of maladjustment in school children. Some of these have already been presented:



2. Personality Difficulties ......Quarrelsomeness

Pugnacity Fearfulness Shyness

Excessive obedience

Seclusiveness
Day dreaming
Restlessness
Overactivity
Distractibility

3. Behavior Problems.....Temper tantrums

Disobedience
Destructiveness
Lying
Stealing
Truancy

Sexual misbehavior

4. Educational Problems......Inability to read (although child

has been found to have adequate

intelligence)

Arithmetical disability
Lack of application
Speech disability

When it is remembered that all of these are but symptoms—symptoms that indicate an underlying cause—it should encourage inquiry and the devising of means through which special guidance may be given to the child at an early date, thereby averting the development of more serious problems. Most children present problems at one time or another in the course of their development, and it is important to understand and to properly guide these deviations of conduct in order to prevent permanent impairment of their personality.

One should not expect teachers to diagnose and to treat personality and behavior disorders, but one does expect them to be able to apprehend these difficulties and to refer them to the proper resources for further study. The State Department of Mental Health has geographically placed Child

Guidance Clinics throughout the state, to which children presenting any of the aforementioned problems may be referred. Owing to the difficulty of providing suitably trained and experienced personnel some of these have had to be discontinued. A list of such clinics is available through the Division of Mental Hygiene, 100 Nashua Street, Boston.

To understand a child's reactions, there must be a study of his physical and mental make-up, his home environment, the intelligence and stability of his parents, the nature of the community, and other environmental factors present in school or playground.

A common cause of maladjustment of the child in school is poor personal adjustment of teacher. The attitude of such a teacher may produce such emotional tensions in the classroom as to affect unfavorably her young pupils. Other causes are poor home-child relationship, poor home-school relationship, poor individual teacher-child relationship and incorrect placement in grade.

# PRACTICABLE MENTAL HYGIENE GUIDEPOSTS

Let the teacher view each child as an individual with needs to be served, particular capacities to be developed, and interests to be respected. She should appraise each child objectively, without bias or prejudice, and ascertain why he behaves as he does, e.g., What satisfaction does his behavior afford him? Why is life unsatisfactory to him? What methods used by his parents or teachers have resulted in these patterns of behavior? What combination of circumstances has called forth this reaction in him? The teacher should try to know the child's home, his position in it, and to make certain that the curriculum is suited to the child's needs and capacity. She should aim to construct in the child a feeling of security. She should try to evaluate herself and her relationship to the child and when in doubt, she should refer the child to a Child Guidance Clinic.

#### BIBLIOGRAPHY

Every day Problems of the Everyday Child—Douglas A. Thom, M.D.—Appleton Century Co.

Mental Hygiene and Education—Mandel Sherman—Longmans, Green & Company.

Mental Health Through Education—Carson W. Ryan—Commonwealth Fund, Oxford Univ. Press.

Our Children—Child Study Association of America.

Personality Adjustment of the Elementary School Child—National Education Association.

#### **ENVIRONMENT**

#### CLASSROOM—SEATING

Chair backs should provide two transverse supports, the upper support above angles of shoulder blades, the lower support to conform to curve of lower back. They should provide below this, a space for lower part of back, seats should be adjustable or of a sufficient number of sizes to suit individual differences. There should be constant readjustment to keep pace with growth of children. The distance from the surface of the seat to floor shall be such that when lower leg is perpendicular the whole sole of the foot rests on the floor. The length of the seat should support three-quarters of the length of the upper leg. It should slope slightly backward and conform to the curves of the buttocks.

The desk surface should be slightly inclined toward the body and wide enough to make possible the support of the hand while writing on the bottom lines of writing book or paper. A plumb line from the edge of the desk should fall from  $1\frac{1}{2}$  to 2 inches inward from edge of seat.

Helpful suggestions may be obtained from Bancroft's "Posture of School Children."

# LIGHTING

The results of research have consistently indicated the potential contributions to human efficiency and to welfare to be gained from the use of more and better lighting in the performance of visual tasks. Lighting should be provided of such quality and quantity as to enable the eyes to accomplish their task with accuracy, speed, ease, and comfort. It has also been learned that the presence of direct glare has a highly injurious action upon the vitamin supply of the eye.

#### INTENSITY

In determining lighting standards emphasis has lately been placed upon comfort more than upon foot candles as a sole guide.

General—minimum of 30 foot candles.

Sewing and drawing rooms—minimum of 50 foot candles.

Hallways, stairways, locker rooms, toilets, auditoriums—10 foot candles minimum.

Gymnasiums and playrooms, intensity determined by the use made of the room.

Team games require well diffused light of high intensity.

# MAINTENANCE

Illumination deteriorates rapidly unless windows are kept clean and the wall and ceiling surface are maintained in good condition. As lamps age, they blacken and give less light. Dirt and dust reduce the reflecting and transmitting qualities of the lighting units. Provision should be made for a system of regular inspection, preferably with a lightmeter, as a check against excessive and wasteful loss of illumination.

Achievement of these goals will, in most instances, require the services of a skilled expert in illumination. Through the local light and power company an illuminating engineer can usually be secured who will act as a consultant on the technical details involved in attaining desirable standards of illumination.

## BETTER UTILIZATION OF EXISTING LIGHTING FACILITIES

Existing lighting installations in school buildings are often inadequate. Under such circumstances, it is necessary to make the most effective use of natural light that is possible.

It is desirable to obtain even illumination throughout the classroom. An unshaded lower window area permits only about one-third of the amount of room illumination that an equal area of unshaded upper window will provide. Thus top sections of the windows best serve the rows of seats farthest from the windows. Windows should be cleaned frequently and should be unobstructed by pictures, curtains, shrubbery, decorations and plants.

Two-way shades mounted at the midline of the windows and operating up and down independently will provide greater flexibility of adjustment than shades operating only one way. If one shade only must be used it should be mounted so that it can be raised from the bottom to the top of the window. Experiment with shade adjustment under various weather conditions to determine the arrangement best suited to giving light without introducing glare into the field of vision.

Converting side and rear-wall blackboards into bulletin boards by covering them with a suitable material of light color will increase the light intensity on pupils' desks in the darker parts of the room and also reduce undesirable contrasts. If it is preferable to have all blackboard space available, white cloth window shades may be installed and kept down except when the blackboards are in use. The back of a map mounted on a portable stand may be used to reflect more light on a particularly dark desk surface. This resource, however, is apt to introduce an undesirable glare.

#### ROOM FINISH

Ceilings and upper walls should be white, light cream, ivory, or bluish white of non-glossy finish. Minimum coefficient of reflection 75%. Lower walls should be in light colors of non-glossy finish with a minimum coefficient of a reflection 50%. Floors, desks, and chairs should be in light natural non-glossy finish. Surfaces, such as glass, which may be troublesome sources of reflected light should be avoided.

# LUMINAIRES (LIGHTING UNITS)

Light should be well diffused. The contrast between the light source and its background should not be greater than 20 to 1 if the luminaire is visible. If of high brightness the luminaire should be 20°–30° above the eye level of the worker. Indirect lighting should be utilized if a light source of high intensity is used. Direct lighting units should be of the enclosed globe type. The surface brightness of direct or semi-direct units should not exceed 2 foot candles per square inch.

The level of illumination in the classroom may be raised and the windows' glare may be avoided by turning individual desks at an angle which places the window just behind the child's shoulder and at the same time avoids throwing the child's shadow upon his desk. When seats and desks are fixed, it may be necessary to keep the shades drawn all the way on the front window or windows, and supplement daylight with artificial light. Glass surfaces and other shiny, reflective surfaces which are the sources of objectionable glare, should be covered, eliminated or subdued.

Pupils with impairment of vision should be seated where their work receives the best light.

Amer. Recog. Practices of School Lighting.

Ill. Eng. Soc., 51 Madison Avenue, New York, New York. (1938)

## HEATING AND VENTILATION

The recommended temperature for classrooms is 68°. The thermometer should be on the level of children—not on an outside wall. A unit system of heating and ventilating permits suitable regulation of temperature in individual rooms. In rural schools the stove should be jacketed and fresh air supplied from outside space between stove and jacket. A foul air outlet must be maintained. Children should learn to keep temperature records.

#### SANITATION

The maintenance of standards is the responsibility of the Superintendent of Schools and of the principal of the building.

Urban standards for drinking facilities require one bubbler of a side stream or ring type for at least every 75 pupils. Such drinking facilities must be cleanly separated from sinks where there is handwashing. Rural standards require that the source of drinking water be tested once a year by the Massachusetts Department of Public Health. (No charge.) Water should be stored in closed container with bubbler or spigot. Individual drinking cups, preferably of paper or supplied from home, should be kept on hooks in a cabinet made for the purpose.

# Standards for Hand Washing Facilities (Urban)

One bowl for 40–50 children should be located near the toilets. Soap—liquid or powdered—and paper towels should be kept in supply. Rural standards require a tank and sink unit or at least individual pails, liquid soap, and paper towels.

# STANDARDS FOR TOILETS

Urban standards require 3 per 50 pupils. Where seats are used by lower grades only, they should be adapted to

the size of the children. Urinals should be of porcelain. Floors, lower part of walls, and partitions of booths should be of nonabsorbent material. Ventilation should be by blower type fan with an outside vent. Vent openings should be in water closets and urinal fixtures and in the walls of each water closet compartment. Rural standards for toilets require either the pit type, chemical type or the septic type. A pit type toilet must be made and kept insect proof. That is, its walls must be continued below ground surface to a distance of 18 inches or more. Its windows must be screened, its seats must be kept covered. The pits must be treated with chloride of lime and either ashes or earth.

#### REST ROOM FOR TEACHERS

This should be attractively decorated and furnished, well lighted and ventilated, with at least one window, with comfortable chairs, couch, toilet, lockers for clothes, and facilities for heating water.

## HEALTH ROOM

The Health Room should be attractive. It should be on the first floor, with access to natural light and ventilation and it should be provided with outlets for artificial lights and for equipment, e.g., vision testing equipment. It is desirable that the location should be free from the noises of the gymnasium, playground, shop, and music room. It should be at least 24 ft. x 18 ft., the long dimensions being necessary for hearing and vision testing.

# CUBICLES

Examining rooms should be provided adjacent to the health room. They should measure 10 ft. x 8 ft. and should have at least one window but one which will permit privacy during the physical examination of child and conference with parent. The nurse's office should measure 10 ft. x 8 ft. and be provided with at least one window. It should have a

connecting door to examination room. In addition to its use as her office it may be used for parent-nurse conference, teacher-nurse conference, pupil-nurse conference and work-room for nurses. This cubicle should be equipped with hand-washing facilities with hot and cold running water, which may be used by doctor and nurse. Base plugs for electrical equipment are necessary. Furthermore, an isolation cubicle should be provided, measuring about 10 ft. x 6 ft., to be used to separate children with undiagnosed illnesses from other children.

#### THE LUNCH ROOM

Should have adequate space and equipment for the preparation, serving and eating of food. It should be maintained in sanitary condition. It should be a comfortable, attractive place to eat lunch.

#### THE PLAYGROUND

It should be clean, attractive, safe, free of broken glass, of loose rocks and of pebbles. Because of automobiles, it should be fenced or walled. Play should be supervised at all times. Police protection should be provided at cross walks at the opening and the closing of all sessions.

References—Janitor and the School Child—Metropolitan Life Insurance Company, 1 Madison Square, New York, N. Y.

# EQUIPMENT FOR HEALTH ROOM

Cot

Pillow with waterproof covering

Blanket (washable)

Desk and desk chair

Other chairs

Wastepaper basket

Table with washable top

Hooks for hanging clothing

Red Cross textbook on First Aid

Supply of School Physical Record cards

Supply of referral slips

Files

Screens

Running water or hand basin and pitcher

Soap

Dressing pail

Emesis basin

Electric plate for heating water

2 glass jars for holding tongue depressors and applicators

Paper cups

Paper towls

Throat sticks

Scale—Standard (with measuring rod)

Vision and hearing test equipment and report forms

Mirror—full length for health teaching

Medicine cabinet with first aid equipment

Wooden applicator and toothpicks

Sterile gauze

Absorbent cotton

Adhesive tape

Prepared dressings

Roller bandages of two widths

Scissors

Antiseptic

Slings and splints

Aromatic spirits of ammonia

Safety pins

Clinical thermometers

Supply of accident report slips

#### SERVICES OFFERED BY THE

# MASSACHUSETTS DEPARTMENTS OF PUBLIC HEALTH, MENTAL HEALTH AND EDUCATION IN RELATION TO THE SCHOOL HEALTH PROGRAM

Upon request, there are available from the Massachusetts Department of Public Health, The Department of Mental Health and The Department of Education consultation services concerning:

- a. Administration and standards of the school health program.
- b. Examination of entering school children.
- c. Examination of school children.
- d. Health education in the schools.
- e. Public health nursing in the schools.
- f. Nutrition services and school lunches.
- g. The teacher's contribution to the school health services.
- h. Communicable disease control.
- i. School sanitation.
- j. School health surveys.
- k. In-service training for teachers and nurses.
- 1. Vision and hearing testing.
- m. Guidance service to school health personnel and parents.
- n. Dental services.

# EQUIPMENT FOR VISION AND HEARING TESTING

Through the Massachusetts Department of Public Health each District Health Officer is equipped with audiometers and the Massachusetts Vision Test which may be loaned to small communities which do not provide their own. Requests would be sent to the District Health Office.

Health Record forms and Notification of Defects may be obtained on request from the Bureau of Health Information

of the Massachusetts Department of Public Health, State House, Boston.

"Health in the Schools", printed material for children and adults, outlines for health teaching and moving picture films may be obtained from the Bureau of Health Information of the Massachusetts Department of Public Health, State House, Boston.

# PHYSICALLY HANDICAPPED CHILDREN

In accordance with Chap. 71, Sect. 46A, and under regulations prescribed by the Departments of Education and of Public Health, school committees are required to ascertain and to report on those children of school age who are physically handicapped. It is mandatory upon the school committees to provide instruction for all children of school age who are physically unable to attend school and who have been approved for such instruction by the Departments of Education and Public Health. Children able to attend school but who have vision, speech or other physical handicaps which prevent normal educational growth and development must be given that special type of training recommended by the Department of Education.

Regulations are provided by the Department of Education defining physically handicapped children to be reported, and the method and forms to be used in reporting them. The regulations also define the qualifications of teachers employed to teach those children who are unable to attend school and the minimum hours of instruction that may be given. Consultation service is provided by the Departments of Education and of Public Health in cases where there is doubt as to the type of education or of medical care that a child should be receiving.

# Sight Saving Classes

All children who go to Sight Saving Class must be recommended by an ophthalmologist. The following children are eligible for a Sight Saving Class: children with a visual handicap who have normal intelligence; children whom the ophthalmologist recommends because of eye condition; children who need to wear an occluder over the good eye in order to stimulate the vision in the poor eye; any child who has a progressive eye condition, even though the vision is better than 20–70; any child whose vision is 20–70 or less with best correction but not low enough for education in a school for the blind.

# Lip Reading Classes Hearing

The latest figures obtainable from the United States Public Health Service show that 1,000,000 children in the United States, ages 5–17, have some hearing defect.

Children are referred for lip reading who have: A moderate loss of speech range which does not improve in six months under the care of physician; defective speech because of loss in hearing; failing in school because of loss in hearing; if the better ear has a drop of 25 decibels or more in speech range.

# Vocational Rehabilitation

Rehabilitation is defined as the restoration of the handicapped to the fullest physical, mental, social, vocational, and economic usefulness of which they are capable. Vocational Rehabilitation connotes a plan with an employment objective as the final goal.

Services from the Division of Vocational Rehabilitation, of the Massachusetts Department of Education, with head-quarters at 200 Newbury Street, Boston (and offices in Boston, Lowell, Springfield, Pittsfield, Worcester and New Bedford), in furthering training and education may provide a satisfactory transition from school to work for the young person who is handicapped. The Division of Vocational Rehabilitation offers services to any resident of Massachusetts of legal employable age (16 years or over) who has a

physical or mental disability which is a substantial employment handicap and who reasonably may be expected to be fitted for remunerative employment.

The Division offers a variety of services in fitting a handicapped person for suitable employment. The service depends in each case on the individual and he is considered from the point of view of his own interests, aptitudes and physical or mental limitations. The services are:

- 1. Thorough physical examinations.
- 2. Necessary medical, surgical, psychiatric and hospital services.
- 3. Necessary prosthetic devices, such as artificial limbs, hearing aids, braces and the like.
- 4. Individual vocational counseling and guidance.
- 5. Training for a job—in schools, on the job, by correspondence, or by tutor.
- 6. Maintenance and transportation during rehabilitation, if necessary.
- 7. Necessary tools and equipment.
- 8. Placement on the right job.
- 9. Follow-up to make sure the worker and the job are properly matched.

Diagnostic services, both medical and vocational, individual counseling and guidance training, education, and placement on the job are available without investigation of the economic need of the applicant. It is necessary, however, to determine economic need for the following services, surgical and medical treatment, psychotherapy, hospitalization, prosthetic appliances, instructional and training supplies, transportation and maintenance (if required) during rehabilitation.

The program of physical restoration services is designed to help the medically indigent, who often postpone surgery and medical treatment because they are unable to pay for the service. Care for acute illness may not be furnished. These services are intended for conditions that are relatively stable, slowly progressive or chronic but amenable to treatment. It is the policy of this program to compensate physicians and hospitals of the patient's choice in the same manner in which it compensates the schools and colleges for tuition.

# Sources of Additional Information

Information regarding public and private agencies which offer aid in the care of children of all ages, and clinics for crippled children, blind and deaf children, tuberculosis clinics, and child guidance clinics may be obtained from the following District Health Offices of the Department of Public Health.

Dr. Harold W. Stevens District Health Officer 105 William Street New Bedford, Mass.

(Vacancy) Acting District Health Officer 1245 Hancock Street Quincy, Mass.

Dr. Robert E. S. Kelley District Health Officer 227 Commonwealth Avenue Boston, Mass.

Dr. Walter J. Pennell District Health Officer 367 Main Street Wakefield, Mass. (Vacancy)
District Health Officer
476 Main Street
Worcester, Mass.

Dr. Arthur E. Burke District Health Officer Central Avenue Ayer, Mass.

Dr. Walter W. Lee District Health Officer Fernald Hall, University of Mass. Amherst, Mass.

Dr. Charles E. Gill District Health Officer 184 North Street Pittsfield, Mass.

A list of agencies supplying educational material relating to health may also be obtained from these offices.

Many of the school systems in Massachusetts have prepared attractive and useful pamphlets for distribution to parents of entering school children. The Division of Public Libraries, 200 Newbury Street, Boston, will gladly lend copies of these pamphlets to teachers, superintendents, and

school boards, who are interested in preparing such material for their communities.

Applications for vocational rehabilitation may be made to any office of the Division for the handicapped child by his parents, or by any other person or agency in his own behalf. It is not necessary to use any special form or blank.

The vocational counselors of the Division are available for advice and guidance at any time the school or the parents wish to consult them.

- 1. They are especially interested in handicapped children of legal employable age who may be leaving school.
- 2. The vocational rehabilitation program, in addition to physical restoration provides a disabled person an opportunity to acquire skill leading to suitable employment.

#### GENERAL LAWS—SCHOOL HYGIENE

Distributed by the Massachusetts Department of Public Health

#### SUBJECTS OF STUDY

Chap. 71, Sec. 1. (As amended by chapter 222, Acts of 1923.) Maintenance of Public Schools and Subjects of Study. Every town shall maintain, for at least one hundred and sixty days in each school year unless specifically exempted as to any one year by the department of education, in this chapter called the department, a sufficient number of schools for the instruction of all children who may legally attend a public school therein. Such Schools shall be taught by teachers of competent ability and good morals, and shall give instruction and training in orthography, reading, writing, the English language and grammar, geography, arithmetic, drawing, the history and constitution of the United States, the duties of citizenship, physiology, and hygiene, good behavior, indoor and outdoor games and athletic exercise. In connection with physiology and hygiene, instruction as to the effects of alcoholic drinks and of stimulants and narcotics on the human system, and as to tuberculosis and its prevention, shall be given to all pupils in all schools under public control, except schools maintained solely for instruction in particular branches. Such other subjects as the school committee considers expedient may be taught in the public schools.

Chap. 71, Sec. 42. (Amendment, 1941.) Handicapped Children. The school committee of every town shall annually ascertain, under regulations prescribed by the department and the department of mental health, the number of children three years or more retarded in mental development in attendance upon its public schools, or of school age and resident therein. At the beginning of each school year, the committee of every town where there are ten or more such children shall establish special classes for their instruction according to their mental attainments, under regulations

prescribed by the departments. A child appearing to be mentally retarded in any less degree, may, upon request of the superintendent of schools of the town where he attends school, be examined under such regulations as may be prescribed by the department and the department of mental health. No child under the control of the department of public welfare or of the child welfare division of the institutions department of the city of Boston, who is three years or more retarded in mental development within the meaning of this section, shall, after complaint made by the school committee to the department of public welfare or said division, be placed in a town which is not required to maintain a special class as provided for in this section.

An Act Relative to the Education of Certain Physically Handicapped Children—Be it enacted, etc., as follows:

Section 46A of chapter 71 of the General Laws, as most recently amended by chapter 357 of the Acts of 1946, is hereby amended by striking out the last sentence and inserting in place thereof the three following sentences:— On or before the fifteenth day of July in each year the town furnishing such instruction shall submit to the department an itemized statement of the following items of actual cost of instruction to children confined in hospitals, sanitaria, and similar institutions located therein for the preceding school year: teachers, textbooks, supplies and general control. The department shall determine the reasonableness of such cost, and shall, on or before the first day of September following, either notify said town that the cost is approved, or shall send to the town its own determination of reasonable cost. Such cost as approved or determined shall be divided by the pupil days of instruction given, and the result shall constitute the daily tuition for each pupil to be paid by the town where the parent or guardian has a legal residence to the town furnishing such instruction.

Chap. 40, Sec. 5. (New paragraph inserted after paragraph 39 by chapter 28 of the Acts of 1935.) Appropriation

of Money for Eyeglasses and Spectacles for Needy School Children. To provide eyeglasses and spectacles for school children eighteen years of age or under who are in need thereof and whose parents or guardians are financially unable to furnish the same. Money so appropriated shall be expended under the direction of the mayor and city council of a city and the selectmen of a town.

Chap. 40A. (Added 1947.) For the payment, by providing insurance coverage or otherwise, of the reasonable hospital, medical and surgical expenses incurred by or in behalf of any student in any of its public schools by reason of injuries sustained by him or her while participating, or practicing or training for participation, in any game, meet or contest conducted or held as a part of or in connection with the physical education or athletic training program of its school department. Money so appropriated shall be expended under the direction of the school committee. (Approved June 13, 1947.)

Chap. 69, Sec. 29. (Insertion of new section after Section 28 by chap. 313 of Acts of 1938.) Instruction in Lip Reading for Certain School Children Whose Hearing is Defective. The school committee of any town, or any superintendency union or district, where there is in attendance in any public or private school any child under the age of eighteen whose hearing is defective may provide instruction in lip reading for such child. Such instruction shall be in addition to the regular school instruction and shall be for at least one hour per week during the time when such public schools are in session.

# SCHOOL ORGANIZATIONS

Chap. 71, Sec. 47. (As amended by chap. 199, Acts of 1935.) Supervision of Athletic and Other School Organizations. The committee may supervise and control all athletic and other organizations composed of public school pupils and bearing the school name or organized in con-

nection therewith. It may directly or through an authorized representative determine under what conditions the same may compete with similar organizations in other schools. Expenditures by the committee for the organization and conduct of physical training and exercises, athletics, sports, games and play, for providing proper apparatus, equipment, supplies, athletic wearing apparel and facilities for the same in the buildings, yards and playgrounds under the control of the committee, or upon any other land which it may have the right or privilege to use for this purpose, and for the employment of experienced athletic directors to supervise said physical training and exercises, athletics, sports, games and play, shall be deemed to be for a school purpose.

#### MEDICAL AND NURSING SERVICE

Chap. 71, Sec. 53. (As amended by section 1, chapter 357, Acts of 1921.) Appointment of School Physicians and Nurses. The school committee shall appoint one or more school physicians and nurses, shall assign them to the public schools within its jurisdiction, shall provide them with all proper facilities for the performance of their duties and shall assign one or more physicians to the examination of children who apply for health certificates required by section eighty-seven of chapter one hundred and forty-nine, but in cities where the medical inspection hereinafter prescribed is substantially provided by the board of health, said board shall appoint and assign the school physicians and nurses. The department may exempt towns having a valuation of less than one million dollars from so much of this section as relates to school nurses.

Chap. 71, Sec. 53A. (Added by section 2. chapter 357, Acts of 1921.) District may employ School Physicians and Nurses. A superintendency district formed and conducted under the provisions of section sixty, or a superintendency union formed and conducted under the provisions of sections sixty-one to sixty-four, inclusive, may employ one or more

school physicians and may employ one or more school nurses; determine the relative amount of service to be rendered by each in each town; fix the compensation of each person so employed; apportion the payment thereof among the several towns; and certify the respective shares to the several town treasurers. A school physician or nurse so employed may be removed by a two thirds vote of the full membership of the joint committee.

Chap. 71, Sec. 53B. (Added by section 2, chapter 357, Acts of 1921.) Certain Towns exempt. The towns comprised in a superintendency district or union employing, to the satisfaction of the department, one or more school physicians and nurses in accordance with the provisions of section fifty-three A shall be exempt from the provisions of section fifty-three requiring the appointment of such persons.

# Physical Examination of Pupils, Teachers and Janitors

Chap. 71, Sec. 54. Every school physician shall make a prompt examination of all children referred to him as provided in this chapter, and such further examination of teachers, janitors and school buildings as in his opinion the protection of the health of the pupils may require. Every such physician who is assigned to perform the duty of examining children who apply for health certificates shall make a prompt examination of every child who wishes to obtain an employment permit, as provided in section eight-seven of chapter one hundred and forty-nine, and who presents to said physician the pledge or promise of the employer, as provided in said section; and the physician shall certify in writing whether or not in his opinion such child is in sufficiently sound health and physically able to perform the work described in said pledge or promise.

Chap. 71, Sec. 55. (As replaced by sec. 2, chap. 265, Acts of 1938.) Return to School After Infection with or Exposure to Contagion from a Disease Dangerous to the Public Health. A child infected, or in a household where

a person is infected, with a disease dangerous to the public health as defined in accordance with section six of chapter one hundred and eleven, or in a household exposed to contagion from any such disease in another household, shall not attend any public school while he is so infected or remains in a household where such infection or exposure exists. A child returning to school after having been absent on account of such infection or exposure shall present a certificate from the board of health or its duly appointed agent that the danger of conveying such disease by such child has passed; provided, that if such a child returns to school without such a certificate, after having been absent on account of such infection or exposure, he shall immediately be referred to a school physician for examination and, if it is found by such physician upon such examination that such danger has passed, he may remain at school.

Chap. 71, Sec. 55A. (As added by sec. 3, chap. 265, Acts of 1938.) Handling of Children Showing Signs of Ill Health or Infection. A child showing signs of ill health or of being infected with a disease dangerous to the public health as defined in accordance with section six of chapter one hundred and eleven shall be sent home immediately, or as soon as safe and proper conveyance can be found, or shall be referred to a school physician, who may direct that such child be sent home. In the case of schools remotely situated, such other steps may be taken as will best effectuate the purpose of this section and ensure the safety of such child and of other pupils. The superintendent of schools shall immediately cause the board of health to be notified of all children excluded under this section by reason of any disease dangerous to the public health.

Chap. 71, Sec. 56. (As substituted by sec. 4, chap. 265 of the Acts of 1938.) Notification of Parents. If any child is found to be suffering from any disease or defect, or if any child is found to have any defect or disability requiring treatment, the school committee shall forthwith notify the parent or guardian of such child.

Chap. 71, Sec. 57. The committee shall cause every child in the public schools to be separately and carefully tested and examined at least once in every school year to ascertain defects in sight or hearing, and other physical defects tending to prevent his receiving the full benefit of his school work, or requiring a modification of the same in order to prevent injury to the child or to secure the best educational results, and to ascertain defects of the feet which might unfavorably influence the child's health or physical efficiency, or both, during childhood, adolescence and adult years, and shall require a physical record of each child to be kept in such form as the department may prescribe. The tests of sight and hearing shall be made by the teachers, directions for which shall be prescribed by the department of public health, and the examinations of feet shall be made by the school physicians.

### LUNCHES

Chap. 71, Sec. 72. Sale of Lunches to Pupils and Teachers. The school committee may prepare and sell lunches at one or more school buildings for the pupils and teachers of the public schools at such prices as it deems reasonable.

### VACCINATION

Chap. 76, Sec. 15. (As amended by sec. 5, chap. 287, Acts of 1938.) Vaccination. An unvaccinated child shall not be admitted to a public school except upon presentation of a physician's certificate like the physician's certificate referred to in section one hundred and eighty-three of chapter one hundred and eleven.

Chap. 111, Sec. 183. Exemptions . . . and any child presenting a certificate, signed by a registered physician designated by the parent or guardian, that the physician has at the time of giving the certificate personally examined the child and that he is of the opinion that the physical condition of the child is such that his health will be endangered

by vaccination, shall not, while such condition continues, be subject to the two preceding sections. (Enforced vaccination by boards of health (see 181, 182).

R. L. 44, Sec. 6 (as amended by 1906, 371, and by 1907, 215) does not give an unvaccinated child presenting a certificate that he is not a fit subject for vaccination an absolute right to attend school at all times. A regulation made during a time when smallpox was prevalent to "exclude from attendance all unvaccinated children and also all children who do not present a certificate of revaccination as required by the board of health, until such time as this (school) committee may become satisfied that the imminent danger from contagion of smallpox in our town has ceased," is a reasonable one. Hammond v. Hyde Park. 195 Mass. 29.

The exemption under G. L., c. 76, sec. 15, and c. 111, sec. 183, upon the presentation of the certificate therein described, of a child of school age from vaccination before being admitted to the public schools does not cover the entire period of the child's attendance after the filing of the certificate; the certificate is limited to the period during which his physical condition is such that in the opinion of the certifying physician he is an unfit subject for vaccination. Spofford v. Carleton, 238 Mass. 528.

It has been further held that a regulation of the school committee requiring a renewal of such a certificate every two months, but providing that a pupil failing to renew such certificate should not be excluded from school until a period of two weeks had elapsed after failure to renew, conformed with the law and was valid. Spofford v. Carleton, 238 Mass. 528.

### SANITATION

Chap. 143, Sec. 42. Ventilation and Sanitation. Inspection. Every public building as defined in section one, except schoolhouses in which public or private instruction is afforded to less than eleven pupils at one time, shall be kept

clean and free from effluvia arising from any drain, privy or nuisance, shall be provided with a sufficient number of proper water closets, earth closets or privies, and shall be ventilated in such a manner that the air shall not become so impure as to be injurious to health. If it appears to an inspector (of the Department of Public Safety) that further or different heating, ventilating or sanitary provisions are required in any such public building, in order to conform to the requirements of this section, and that such requirement can be provided without unreasonable expense, he may issue a written order to the proper person or authority, directing such heating, ventilating or sanitary provisions to be provided. A school committee, public officer or person who has charge of, owns or leases any such public building, who neglects for four weeks to comply with the order of such inspector, shall be punished by a fine of not more than one hundred dollars. The district health officers or such other officers as the department of public health may from time to time appoint shall make such examinations of school buildings subject to this section as in the opinion of the department (Department of Public Safety) the protection of the health of the pupils may require. This section shall not apply to Boston.

### EMPLOYMENT OF CHILDREN UNDER SIXTEEN

No person shall employ a child under sixteen years of age, other than a child over fourteen granted an employment permit by the superintendent of schools when such superintendent determines that the welfare of such child will be better served through the granting of such permit, or permit him to work in, about or in connection with any mercantile establishment or in any employment mentioned in section sixty, or as defined in section one, other than street trades as defined in sections sixty-nine to seventy-three, inclusive; provided, that pupils over fourteen in co-operative courses in public schools may be employed by any co-operating mercantile establishment or other co-operating employment as defined by section one upon securing from the superintendent

of schools a permit covering any such co-operating employment; and provided, further, that no permit shall be issued to any child under sixteen to work in, about or in connection with any manufacturing or mechanical establishment, factory or workshop. Children between fourteen and sixteen who possess the educational qualifications set forth in section one of chapter seventy-six and are employed in private domestic service or service on farms shall be required to secure a permit issued by the superintendent of schools covering such employment. The person employing a child between fourteen and sixteen shall procure and keep on file, accessible to the supervisors of attendance of the town, to agents of the department of education, and to the department of labor and industries or its authorized agents or inspectors, the permit for employment issued to such child and shall keep a complete list of the names and ages of all children so employed.

Chap. 149, Sec. 87. Issue of Employment Certificates. An employment certificate shall be issued only by the superintendent of schools or by a person authorized by him in writing, or, where there is no superintendent of schools, by a person authorized in writing by the school committee of the town where the child to whom it is issued resides during his employment, or, if the child resides outside the Commonwealth, of the town where the child is to be employed; provided, that no member of a school committee or other person authorized as aforesaid shall have authority to issue such certificate for any child then in or about to enter such person's own employment or the employment of a firm or corporation of which he is a member, officer or employee. If an employment certificate is issued to a child under sixteen authorizing employment in a town other than that of his residence, a duplicate thereof shall be sent forthwith to the superintendent of schools of the town where the employment is authorized.

The person issuing an employment cetificate shall, before

issuing it, receive, examine, approve and file the following papers, duly executed:

- (1) A pledge or promise, signed by the employer or by an authorized manager or superintendent, setting forth the character of the specific employment, the number of hours per day during which the child is to be regularly employed, and the name and address of the employer, in which pledge or promise the employer agrees to employ the child in accordance with this chapter, and to return the employment certificate as provided in the preceding section.
- (2) The school record of such child, filled out and signed as provided in the following section, except when such record may be waived thereunder.
- (3) A certificate, signed by a school or family physician, or by a physician appointed by the school committee, stating that the child has been thoroughly examined by said physician, and in his opinion is in sufficiently sound health and physically able to perform the work which the child intends to do.
- (4) Evidence of age, showing that the child is fourteen, which shall consist of one of the following proofs of age:
- (a) A birth certificate, or a duly attested transcript thereof, made by a register of vital statistics or other officer charged with the duty of recording births.
- (b) A baptismal certificate, or a duly attested transcript thereof, showing the age and date of baptism of the child.
- (c) If none of the aforesaid proofs of age is obtainable, and only in such case, the person issuing employment certificates may accept in lieu thereof a passport or a duly attested immigration record, or transcript thereof, showing the age of the child, or other official or religious record of the child's age; provided, that it shall appear to the satisfaction of said person that the same is good and sufficient evidence of the child's age.
- (d) If none of the aforesaid proofs of age is obtainable, and only in such case, the person issuing employment cer-

tificates may accept in lieu thereof a record of age as given on the register of the school which the child first attended in the commonwealth; provided, that such record was kept for at least two years during the time when such child attended school.

(e) If none of the aforesaid proofs of age is obtainable, and only in such case, the person issuing employment certificates may receive the signed statement of the school physician, or of the physician appointed by the school committee, stating that after examination it is the opinion of such physician that the child is at least fourteen. Such physician's statement shall be accompanied by a statement signed by the child's parent, guardian, or custodian, or, if such child has no parent, guardian, or custodian, by the signed statement of the next adult friend. Such signed statement shall contain the name, date and place of birth and residence of the child, and shall certify that the parent. guardian, custodian or next friend signing it is unable to produce any of the proofs of age specified in this section. Such statement shall be so signed in the presence of the person issuing the employment certificate. The person issuing employment certificates may, before issuing a certificate, require the parent, guardian, custodian, or next adult friend of the child to appear and approve in writing the issuance of said certificate.

A certificate relating to the age or place of birth of any child or to any other fact sought to be established in relation to school attendance shall be issued, upon request, by a town clerk, and no fee shall be charged therefor by a town clerk or other official.

The superintendent of schools or a person authorized by him in writing may revoke the employment certificate or home permit of any child failing to attend a continuation school or course of instruction when so required by sections twenty-two and twenty-five of chapter seventy-one. Whenever such a certificate authorizing employment of a child elsewhere than in his place of residence is held by him the superintendent of schools of the town of his employment shall forthwith notify the superintendent of schools issuing the certificates of the child's failure to comply with said section twenty-two.

Section 88. The school record required by section eightyseven shall be filled out and signed by the principal or teacher in charge of the school which the child last attended. and shall be furnished only to a child who, after due examination and investigation, is found to be entitled thereto. Said school record shall state the grade last completed by such child and the studies pursued in completion thereof. It shall state the number of days during which such child has attended school during the twelve months next preceding the time of application for said school record. It shall also give the name, date of birth, and the residence of the child as shown on the records of the school and the name of the parent, guardian or custodian. If the school record is not obtainable from the principal or teacher in charge of the school which such child last attended, the requirement of a school record may be waived.

No such school record shall be issued or accepted and no employment permit granted unless the child possesses the educational qualifications described in section one of chapter seventy-six; provided, that a child over fourteen who does not possess such qualifications may be granted a limited employment permit good only during hours when school is not in session.

No such school record shall be issued or accepted unless the child has regularly attended the public or other lawfully approved schools for not less than one hundred and thirty days after becoming thirteen; provided, that the school record may be accepted in the case of a person who has been an attendant at a public day or other lawfully approved school for a period of not less than seven years, if in the opinion of the superintendent of schools such person is mentally incapable of acquiring the educational qualifications herein prescribed; and provided, further, that the superintendent may suspend this requirement in any case when in his opinion the interests of the child will best be served thereby.

Section 89. The employment permit required under this chapter shall state the name, sex, date and place of birth. and the place of residence of the child, and describe the color of his hair and eyes and any distinguishing facial marks. It shall certify that the child named in such permit has personally appeared before the person issuing the permit and has been examined, and, except in the case of a limited permit, found to possess the educational qualifications described in section one of chapter seventy-six, and that all the papers required by section eighty-seven have been duly examined, approved and filed and that all the conditions and requirements for issuing an employment permit have been fulfilled. It shall state the grade last completed by said child. Every such permit shall be signed in the presence of the person issuing the same by the child in whose name it is issued. It shall state the name of the employer for whom, and the nature of the employment in which, the permit authorizes the child to be employed. It shall bear a number, show the date of its issue and be signed by the person issuing it. No fee shall be exacted by a town clerk or other official for an employment permit or for any paper required by sections eighty-seven to ninety-five, inclusive. No duplicate employment permit shall be issued until it shall appear to the satisfaction of the person authorized to issue permits that the original has been lost. A record giving all the facts contained on every employment permit issued shall be filed in the office issuing the same, together with the papers required by section eighty-seven. A record shall also be kept of the names and addresses of all children to whom permits have been refused, together with the names of the schools which said children should attend and the reasons for refusal. All the aforesaid records and papers shall be preserved until such children, if living, have become sixteen. Such records and statistics concerning the issuance

of employment permits as may be prescribed by the department of education shall be kept, and shall be open to the inspection of said department, its officers or agents. The permits and other papers required in connection with the issuing of employment permits and educational certificates under this chapter shall be furnished to the local school committees by the department of labor and industries, by which they shall be prepared after conference with the department of education and the approval of the forms thereof by the attorney-general. Said permits, certificates, and papers may bear explanatory matter necessary to facilitate the enforcement of this chapter or to comply with future legislative requirements.

Section 90. Whoever employs a child under sixteen, or whoever procures, or, having under his control a child under sixteen, permits him to be employed in violation of section eighty-six, shall be punished by a fine of not less than ten nor more than fifty dollars or by imprisonment for not more than one month; and whoever continues to employ a child under sixteen in violation of said section, after being notified thereof by a supervisor of attendance or by an inspector, shall for every day thereafter while such employment continues be punished by a fine of not less than fifty nor more than two hundred dollars or by imprisonment for not more than two months; and whoever forges, or procures to be forged, or assists in forging a certificate of birth or other evidence of the age of such child, and whoever presents or assists in presenting a forged certificate or evidence of birth to the superintendent of schools or to a person authorized by law to issue permits, for the purpose of fraudulently obtaining the employment permit required by section eighty-six, shall be punished by a fine of not less than ten nor more than five hundred dollars or by imprisonment for not more than one year, or both. Whoever, being authorized to sign an employment permit, knowingly certifies to any materially false statement therein shall be punished by a fine of not less than ten or more than two hundred dollars.

Whoever, without authority, alters an employment permit after the same is issued shall be punished by a fine of ten dollars.

### CHILDREN'S HEALTH CAMPS

Chap. 111, Sec. 62A. (Added by Chapter 248, Acts of 1924). In each city and town which accepts this and the six following sections, in a city by vote of its city council subject to the provisions of its charter, or in a town by vote of its inhabitants, there shall, except as provided by section sixty-two F, be established, without unreasonable delay, one or more children's health camps for the care and treatment of children of school age in said city or town who upon examination are found to be in need of such care and treatment, but no child shall be given care or medical treatment whose parents or guardian objects thereto.

Sec. 62B. In each such city and town there shall be an unpaid commission, called the commission on children's health camps, to consist of the mayor or chairman of the board of selectmen, who shall have no vote, the superintendent of schools, the members of the board of health, all to serve ex officiis, and also seven residents of such city or town to be appointed by the mayor or the chairman of the board of selectmen. One member of said board shall be designated as chairman by the mayor or the chairman of the board of selectmen. Of the seven persons first appointed after such acceptance, two shall be appointed for terms of one year each, two for terms of two years each, and three for terms of three years each, and thereafter as the term of each member expires his successor shall be appointed for the term of three years. Each appointment made to fill a vacancy in said commission shall be for the balance of the unexpired term.

Sec. 62C. Said commission shall establish, maintain and have control of all children's health camps for the purposes named in section sixty-two A, and in addition, shall have

the management of all sums appropriated by the city or town for the maintenance of such children's health camps. Said commission may receive in trust for the aforesaid purposes any gift or bequest of money or securities and shall forthwith transfer any money or securities so received to the city or town treasurer, who shall administer the same as provided by the following section.

Sec. 62D. The city or town treasurer shall invest, reinvest and hold in the name of said commission any money or securities, or the proceeds thereof, received from said commission under the preceding section, and shall disburse the income or principal thereof on its order; provided, that no disposition of either income or principal shall be made which is inconsistent with the terms of the trust on which the property is held. The treasurer shall furnish a bond satisfactory to the commission for the faithful performance of his duties relative to such property.

Sec. 62E. The commission shall keep a record of its doings and at the close of each financial year shall make a report to the city or town, showing the total amount of such funds and other receipts together with investments, receipts and disbursements on account of the same, setting forth in detail the sources of the receipts and the purposes of the expenditures.

Sec. 62F. Any two or more such cities or towns may vote to form, for such period of time not exceeding five years as such cities or towns may from time to time determine, a union children's health camp district for the purpose of establishing therein one or more union children's health camps. The management of such union children's health camps in such district shall be vested in an unpaid commission, called the commission on union children's health camps, to consist of the following persons from each of the cities or towns constituting such union, namely, the mayor or chairman of the board of selectmen, who shall have no vote, the superintendent of schools, the members of the board of

health, all to serve, ex officiis, and also not exceeding ten members, residents of the cities and towns, comprising the district, to be elected by the ex officiis members of the commission for terms commensurate with the duration of the agreement forming or continuing the union. The term of each person elected to fill a vacancy among the members not serving ex officiis shall be for the balance of the unexpired term. The treasurer of said commission shall be the treasurer for the time being of such city or town within the district as is determined by the members of the commission. The provisions of sections sixty-two C to sixty-two E, inclusive, so far as applicable, shall apply to such commission.

Sec. 62G. No children's health camp shall be established under section sixty-two C or sixty-two F unless the location and construction plans of such camp have been approved by the department, which may inspect any camp at any time.

Sec. 62H. (Added by chapter 17, Acts of 1925, section 2.) A contract for the care and treatment of children coming within the provisions of section sixty-two A, entered into by the commission on children's health camps of a city or town which accepts or has accepted sections sixty-two A to sixty-two G, inclusive, or by a commission on union children's health camps established or to be established under section sixty-two F, with the persons having control of any institution approved by the department in or near said city or town, shall, while such contract remains in force and effective, be deemed satisfactory compliance on the part of such city or town or union with the provisions of said sections sixty-two A to sixty-two G, inclusive, relative to the establishment and maintenance of children's health camps. No such contract shall become effective until it has been approved by the department.

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

## **Dental Certificate**

| THIS IS TO CERTIFY THAT  HAS HAD ALL DENTAL WORK DONE THAT IS NECESSARY AT THIS TIME. |         |
|---|---------|
|   | DENTIST |
| DATE19  |         |
| THIS CERTIFICATE EXPIRES IN SIX MONTHS  |         |

THIS CERTIFICATE EXPIRES IN SIX MONTHS

AN EXAMINATION IS NECESSARY BEFORE THIS CERTIFICATE CAN BE AWARDED

RECOTECT VOLUBICALL DEFINIS TEETLY

PROTECT YOUR CHILDREN'S TEETH
BY A VISIT TO THE DENTIST EACH SIX MONTHS

50m 4-49-26085

(REVERSE)

### WHAT A DENTAL CERTIFICATE SHOULD MEAN

- 1. The final judgment concerning any mouth condition rests with the family dentist.
- 2. The following suggestions are offered concerning the standard for what the Dental Certificate should mean:
  - a. The mouth should be as clean as possible with special attention to food and tartar.
  - b. All cavities should be adequately treated.
  - Special attention should be given to all pits and fissures in deciduous and permanent teeth.
  - d. All abscessed teeth should be extracted.

Endorsed by
The Dental Advisory Committee
of the
Massachusetts Department of Public Health

# **Dental Examination Request**

| Pupil's Nar | ne   |
|-------------|--|
| Town        | School   |
| Date        | Teacher  |
| the las     | your child had a dental examination by your family dentist within st six months? If not, will you arrange for such an examination as a possible? In either case, please have the dentist fill in and sign then return this sheet to the teacher. |
| This is to  | certify that I have examined and found the condition checked below:  |
|             | No dental defects.   |
|             | Dental defects which were present have been completely cared for.  |
|             | Treatment has been started.  |
|             | Treatment is needed but no provision is made for it.   |
| Date        | Signature of Dentist   |
| It is       | not possible to take my child to the family dentist for an examination.  |
|             | Parent or Guardian   |
|             |  |

THIS CARD IS TO BE FILED IN SCHOOL WITH PHYSICAL RECORD CARD

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

50m-7-'48-24056.

# 1. SCHOOL HEALTH

|  | 2.b.111(b)<br>+ 2.b.111(a)<br>X100 = % teachers<br>keeping   | records  |  |   |   |
|--|--|--|--|---|---|
| a. Entering children - continued  vi. Average number of children examined per hour (check):  Public schools: 5 10 15 20 More than 20 Parochial schools: 5 10 15 20 More than 20 If so, describe method  If so, describe method | NOTE: This does not mean that all the findings of the examination need be given the teacher, but rather that she or he have knowledge of such of the findings as will aid the school system in understanding the child and in contributing to his health and well being. | rily for the use of ph<br>marily for the use of<br>Parochial schoo | ii. Are teacher-nurse conferences held in each elementary school classroom at least once annually in which all children in the classroom are discussed and individual children selected and referred for medical examinations?  Public schools | physician (or indirectly elementary teachers in h | iv. Are elementary school teachers given systematic instruction on signs or symptoms as a basis for referring children for medical examinations?  Public schools  Rho gives this instruction? |

| 2.b.v   | X100 = % elem.   | to physician  | 2.b.vi<br>+ 2.b.v   | X100 = % referred children seen by physician  | 2.b.vii  |                     | physician with parent present   |   | 5.b.  | X100 = % elem.<br>children with<br>dental work<br>complete   | 5.c.   | X100 = % secondary<br>pupils with dental<br>work complete |
|---|--|---|---|---|--|---------------------|---|---|---|--|--|---|
| b. Children in elementary grades - continued:  v. Number of children referred by teachers in accordance with ii. and iii. above:  Parochial schools | ed children seen by physician for examination<br>Parochial schools | vil. Number of referred children seen by physicians with parent present: Public schools Total | vili. Number of nurse conferences with parents in schools and at home (not including nurse conferences while nurse is present at medical examination) | <ul> <li>Children in secondary grades:         <ul> <li>I. What groups of students were examined by the school medical advisor during the school year?</li> </ul> </li> </ul> | Number of students examined  11. Number of pupils examined by school medical advisor who were specially referred | by the school staff | iii. Are secondary school teachers given systematic instruction on signs and symptoms as a basis for referring pupils to the physician? | Who gives this instruction:  1v. Are individual records from elementary grades continued in use for secondary school pupils: Medical record Pupil health record | 3. Dental supervision: a. Is there a planned educational and follow-up program to direct children to a dentist for care and to note when such care has been received? | b. Number of elementary school children not needing dental care or having had dental work completed during the school year (or calendar year): Public schools  Total | c. Number of secondary school pupils not needing dental care or having had dental work completed during the school year (or calendar year) |   |

2. Health supervision - continued:

|   |  |  | 5.b   |  |  |   |   |
|---|--|--|---|--|--|---|---|
| 3. Dental supervision - continued:  d. Are treatment services for children provided in: Centralized clinics  Mobile clinics  Private dentists' offices  Private dentists' offices | are given preference, or what other limitations are set? | 4. Problem analysis: a. List the most important local school child health problems | b. What progress has been made during the year in meeting these problems? | 5. Teacher training: a. Has special inservice training in health education been carried on this year? Public schools If so, describe | b. Number of teachers in elementary grades participating | & Cooperative planning in health instruction:  a. Is there a trained supervisor of health education (in addition to physical education supervisor) within the public school system? | b. Is there a trained supervisor of health education in: the health department voluntary agencies |

| 7. Urban<br>b.111<br>÷ a.111<br>X100 - £ mmils  | with approved water supply   | c.111<br>- a.111  | X100 = % pupils<br>with approved exc.<br>disposal   | 7. Rural | b.tv                           | + a.iv<br>X100 = % pupils                        | with approved water<br>supply                    | c.iv                    | X100 = % pupils with approved exc.      | disposal         | 8.a.111<br>+ 7.a.111           | X100 = % urban<br>pupils with<br>meals           | 8.a.iv                       | ÷ 7.8.1v              | X100 = % rural | pupils with |
|---|--|---|---|----------|--------------------------------|--|--|-------------------------|---|------------------|--------------------------------|--|------------------------------|-----------------------|----------------|-------------|
| public school system, is the tary agencies utilized to aid in:  | health instruction which has been cooperatively                                | What provisions are made to develop an integrated program of health teaching? | f. During which of the school terms of the secondary school was health taught as a special disubject? | 4        | Number of schools Enrollment b | Urban Rural Urban Rural Total ; i. iii. iv. v. X |  |                         |   |                  |                                | ned nutritional program coordinated with lunches |                              |                       | X              | d.          |
| 6. Gooperative planning in health instruction - continued: c. If there is no supervisor of health education in the trained supervisor of the health department or volum Curriculum construction Instruction | d. Is there a written program for school developed with the health department? | e. What provisions are made to deve   | f. During which of the school terms subject?  |          |                                |  | 7. Water supply and excreta disposal facilities: | h Weter annuly annuoved | c. Excreta disposal facilities approved | 6. School lunch: | b. Milk or supplementary lunch | c. Nutritional program:                          | 11. Number of pupils reached | 111. Describe program |                |             |

| e. School lunch - continued:  d. Pupils participate in following lunchroom services: Menu planning  Waiting on table or counter Cleaning  Food preparation Cleaning  e. What agencies participate in school lunch program, and how?  9. Health supervision of school staff:  a. Is chest x-ray required of new employees: Professional  Cleanical Robots All Robots Al | -ray required at interniting. |
|--|-------------------------------|
|--|-------------------------------|

